

**Description:** ISM868/915, ISM2.4G

**Series:** Ceramic antenna

**PART NUMBER:** W3320

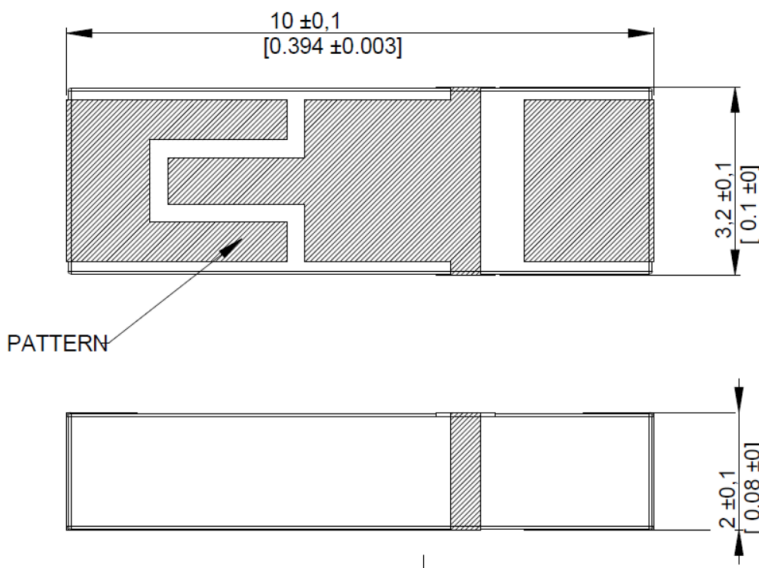


### Features:

- 3 in1 –combo antenna
  - Port 1: 868/915MHz
  - Port 2: 2.4GHz
- Compact size 3.2x10x2mm
- SMT mounting on PCB
- Tape & Reel packing
- High isolation between ports >20dB

### Applications:

- ISM band radios
- 868MHz, 915MHz, 2.4GHz
- IoT, M2M, set top boxes, devices requiring small embedded multiband ISM antenna



All dimensions are in mm / inches

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Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



**Description:** ISM868/915, ISM2.4G**Series:** Ceramic antenna**PART NUMBER:** W3320**ELECTRICAL SPECIFICATIONS**

Frequency	ISM868/915MHz, ISM2.4GHz
Nominal Impedance	50Ω
Return Loss	<-7dB @868/915MHz <-5dB@2.4
Gain	1dBi +/- 1 dB@868/915MHz 3dBi +/- 1 dB@2.4GHz
Radiation Pattern	Omni
Polarization:	Vertical
Power withstanding	2W

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### MECHANICAL SPECIFICATIONS

Weight	0.3 g
Overall Length	10[0.39] MM[INCHES]
Over all width	3.2[0.12] MM[INCHES]
Over all thickness	2[0.08] MM[INCHES]

### ENVIRONMENTAL SPECIFICATIONS

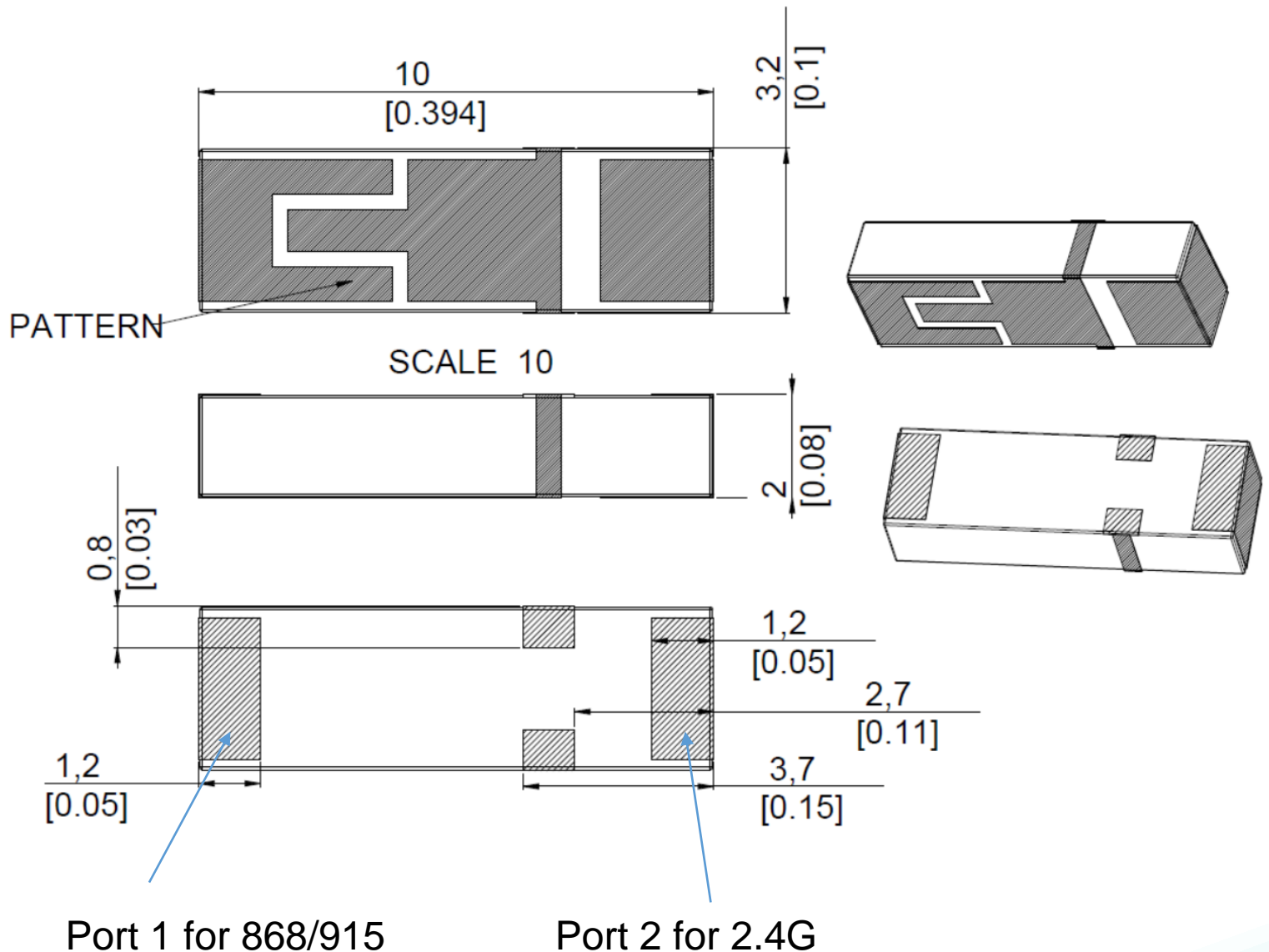
Operating temperature	-40/+85° C
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## MECHANICAL DRAWING



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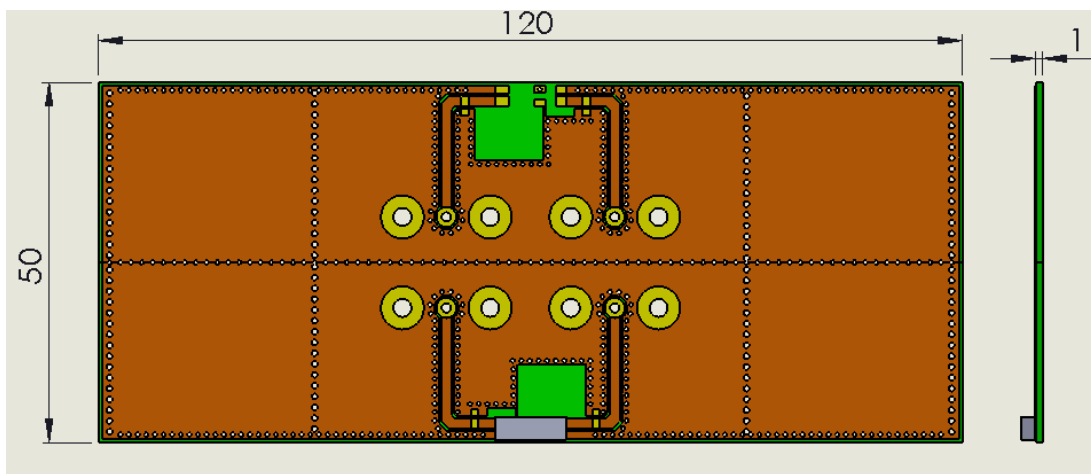
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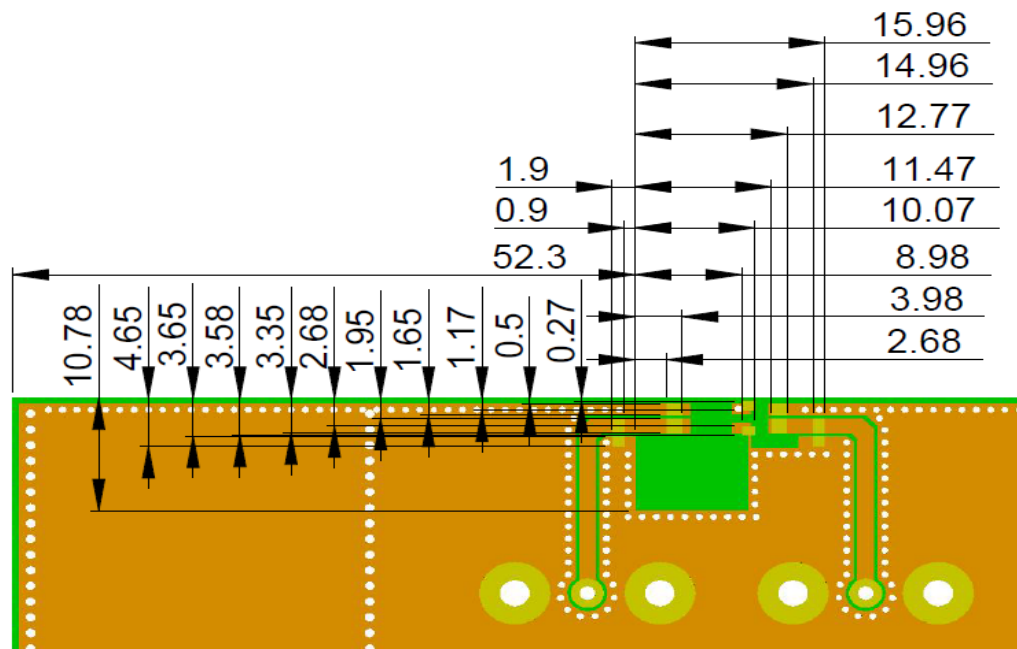
## OTHER SPECIFICATIONS

### PCB LAYOUT

1, PCB material, FR4, size, 120X50X1mm



2, Clearance area (Top)



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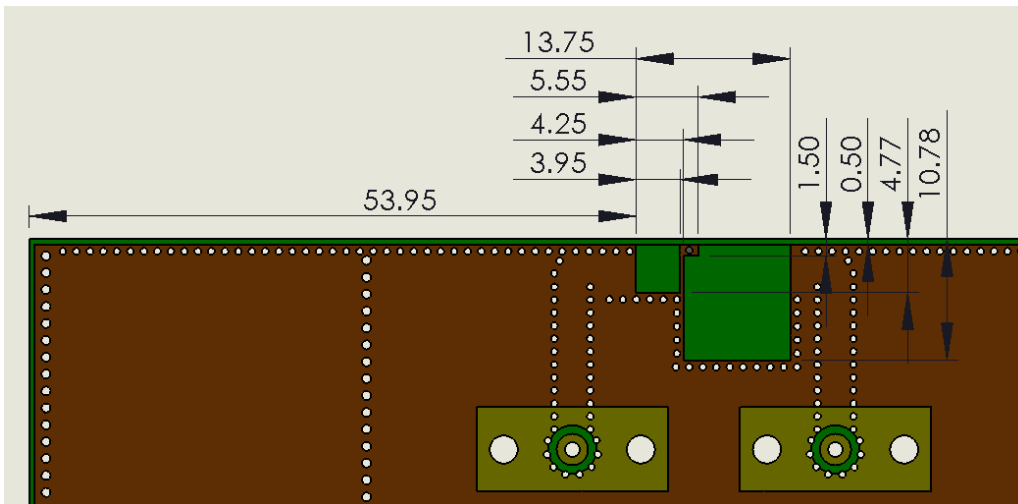
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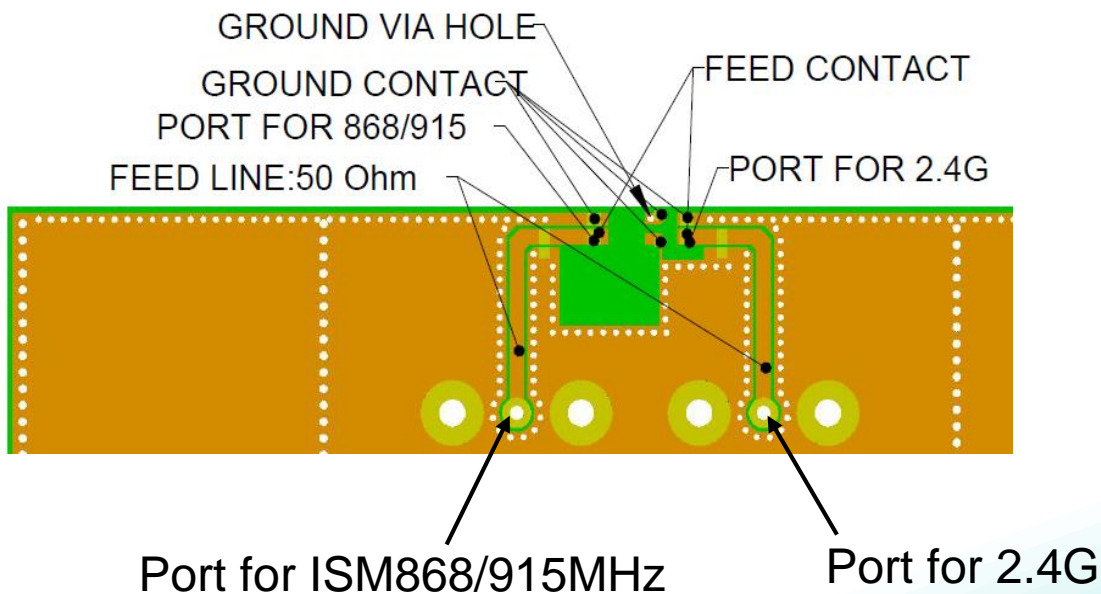
## OTHER SPECIFICATIONS

### PCB LAYOUT

#### 3, Clearance area (Bottom)



#### 4, PCB Features



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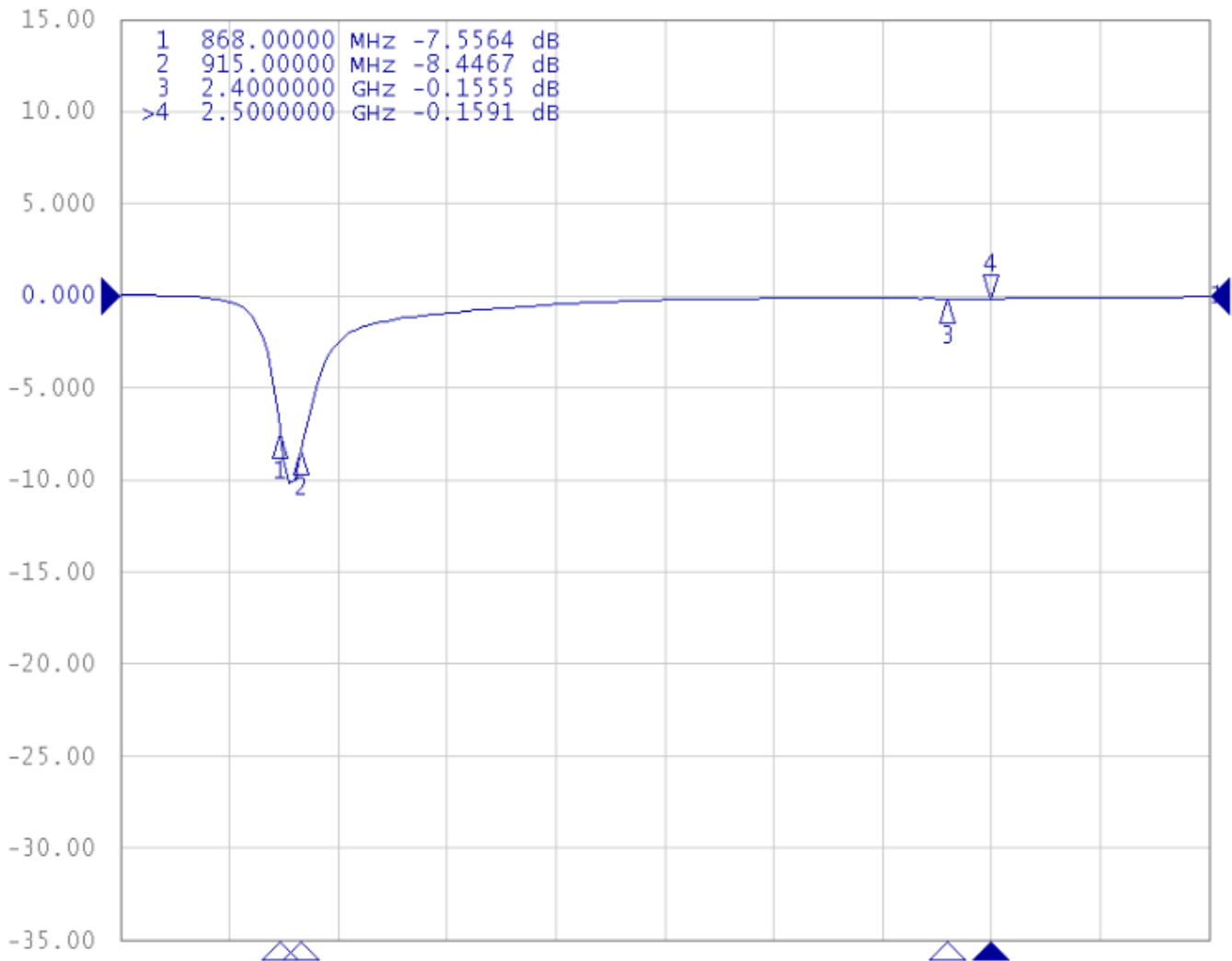
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## CHARTS

### Return Loss

#### ISM868/915MHz

►Tr1 S11 Log Mag 5.000dB/ Ref 0.000dB [F1 Smo]



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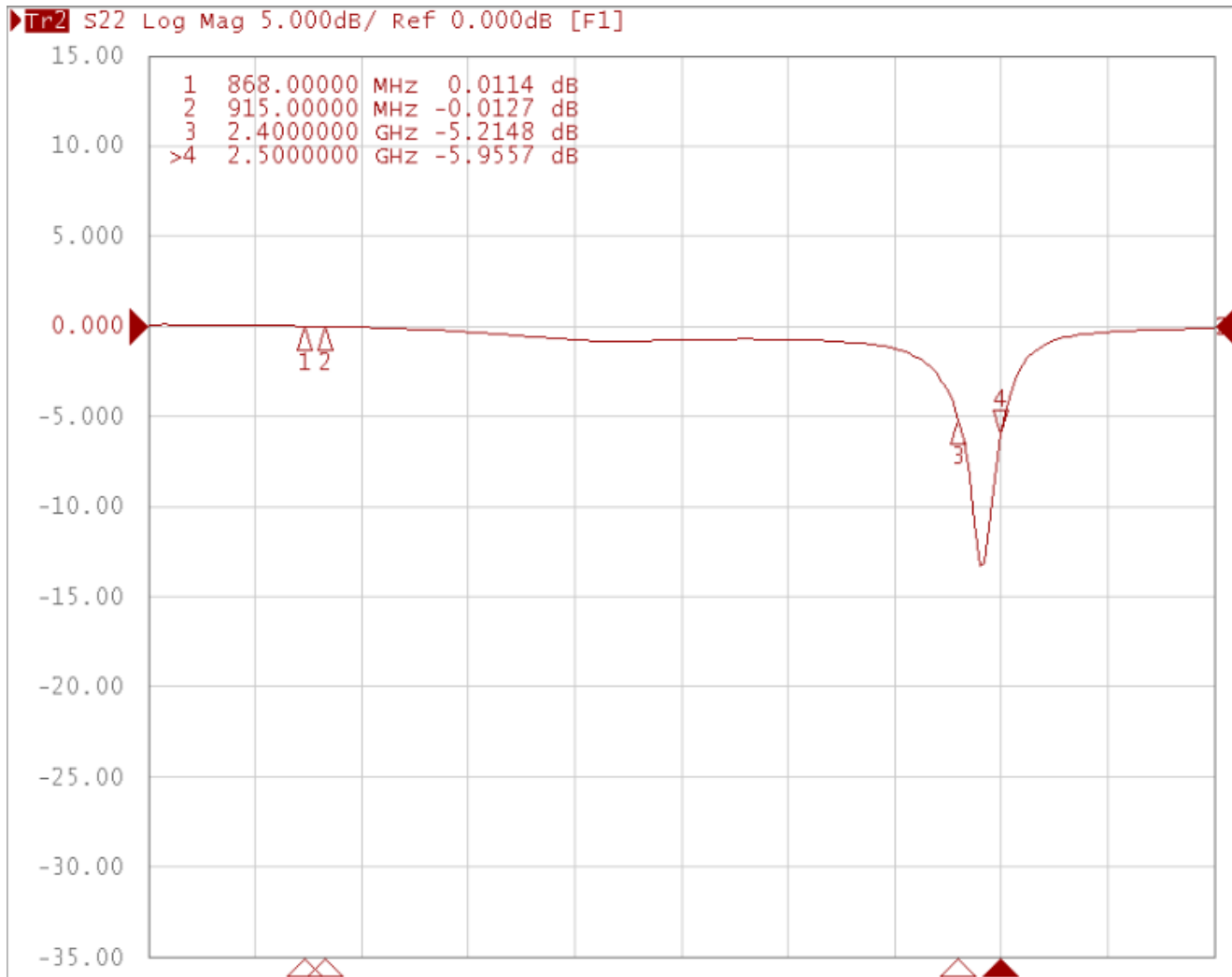
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## CHARTS

### Return Loss

#### ISM2.4G



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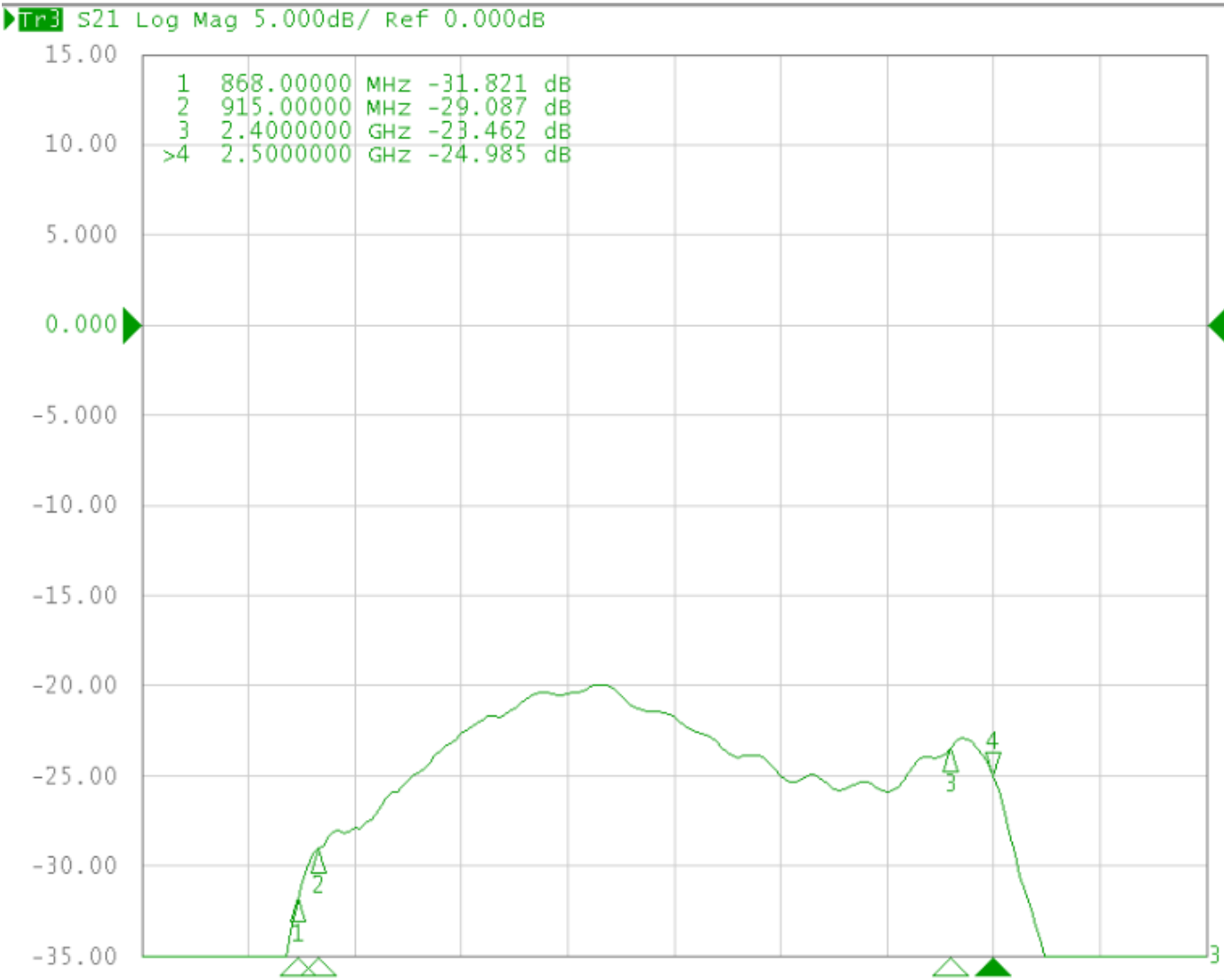
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CHARTS

Isolation



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## CHARTS

### Efficiency(%)



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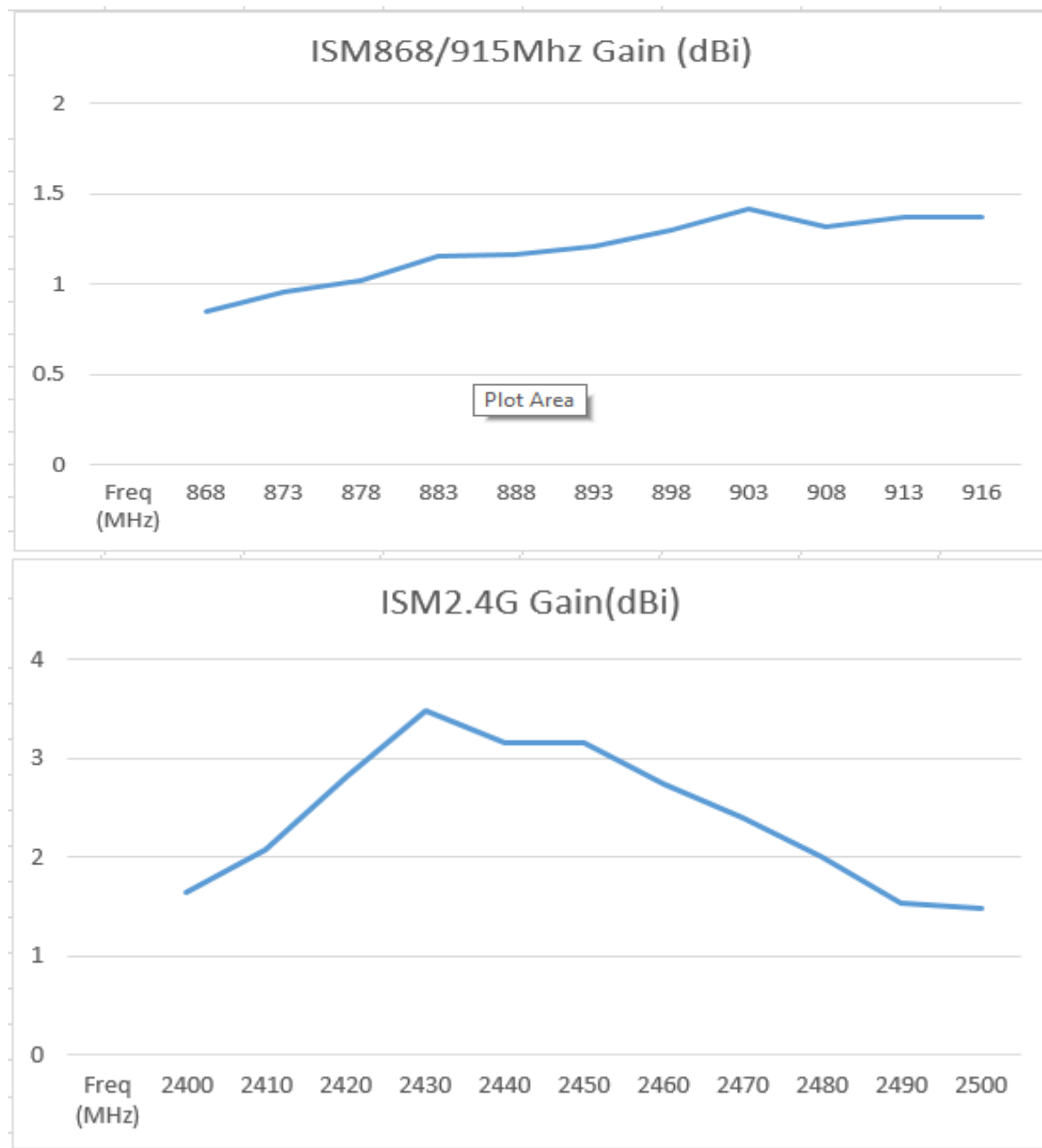
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## CHARTS

Gain ( dBi )



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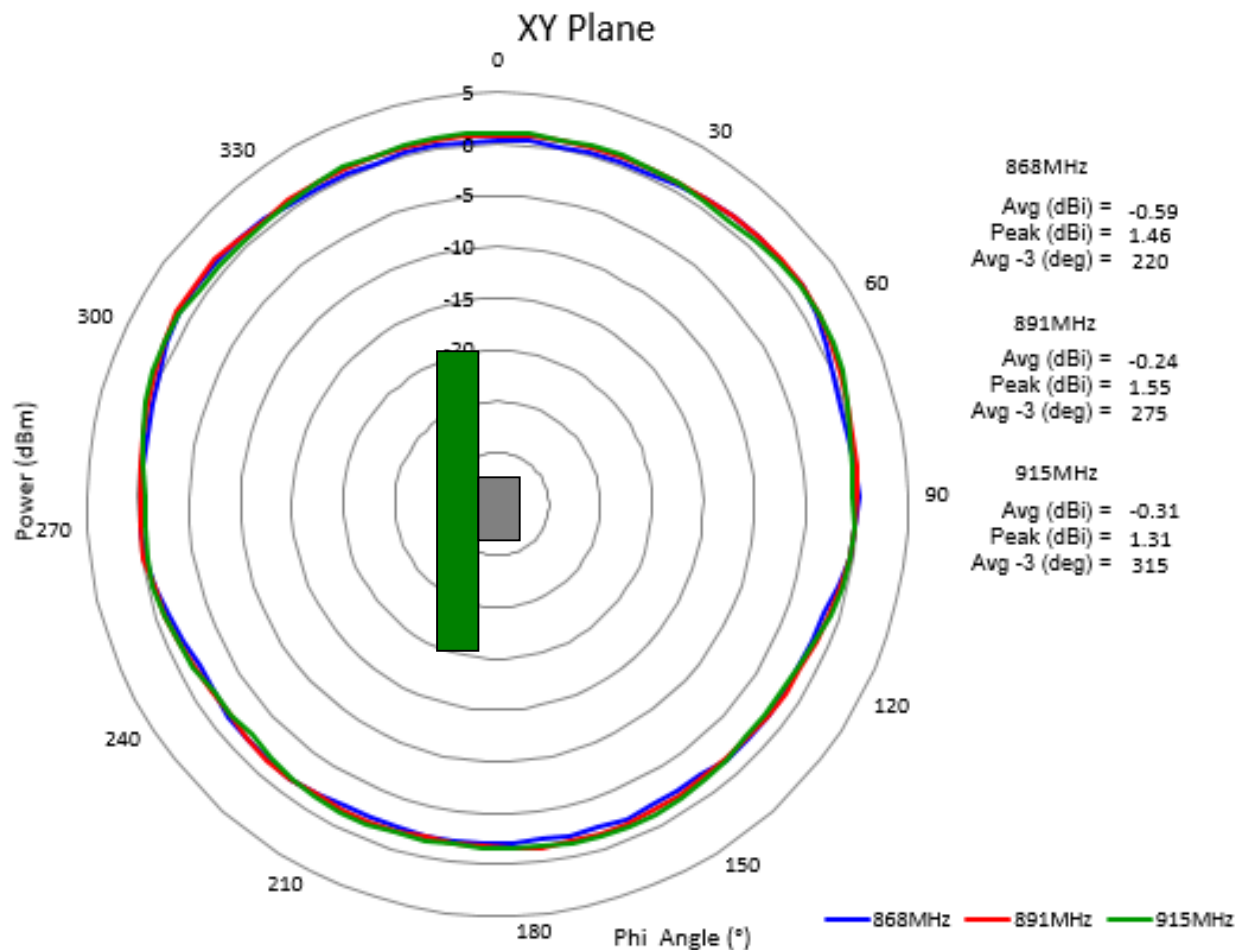
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## CHARTS

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



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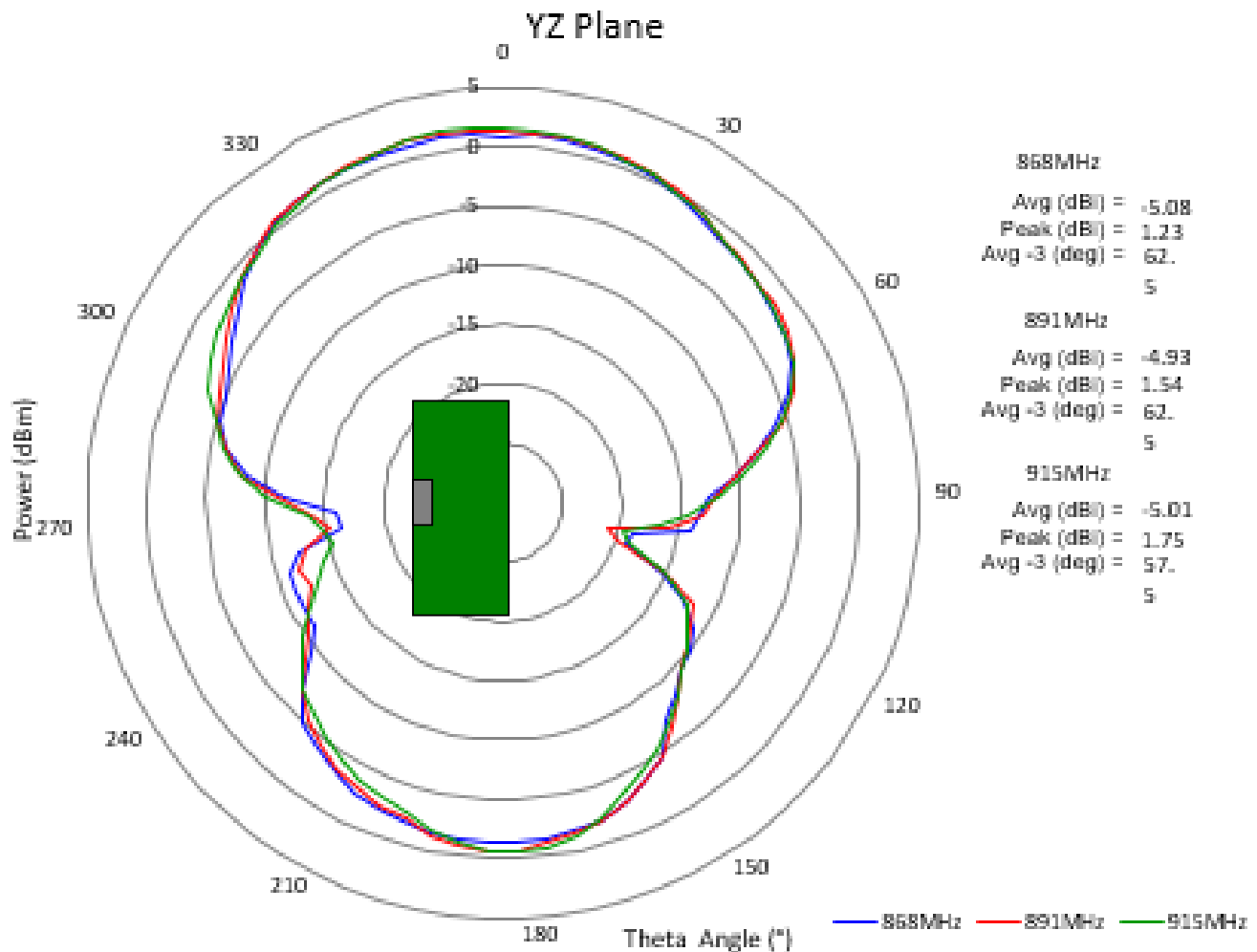
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## CHARTS

ISM868/915MHz  
Y-Z plane



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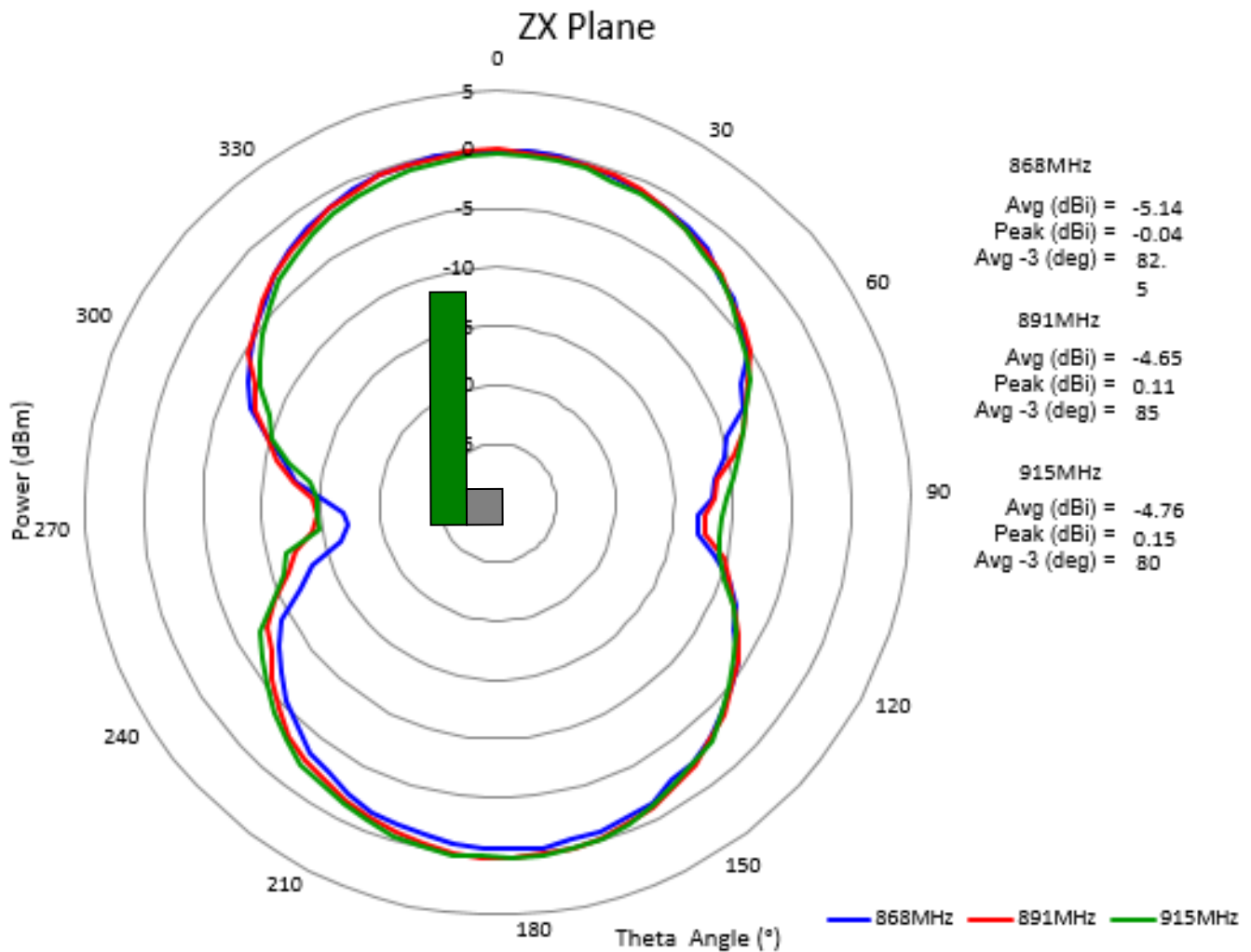
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## CHARTS

ISM868/915MHz

X-Z plane



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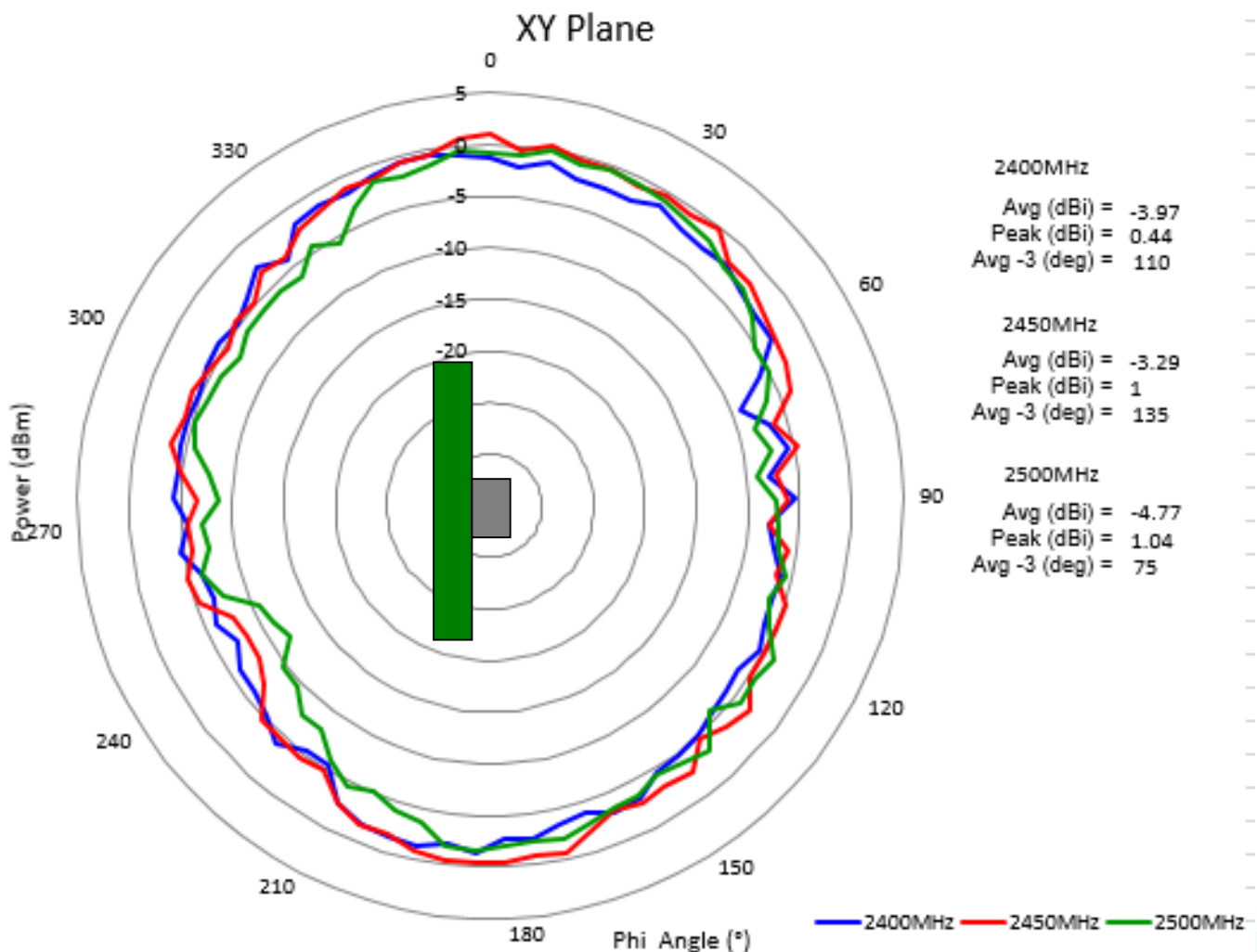
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## CHARTS

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



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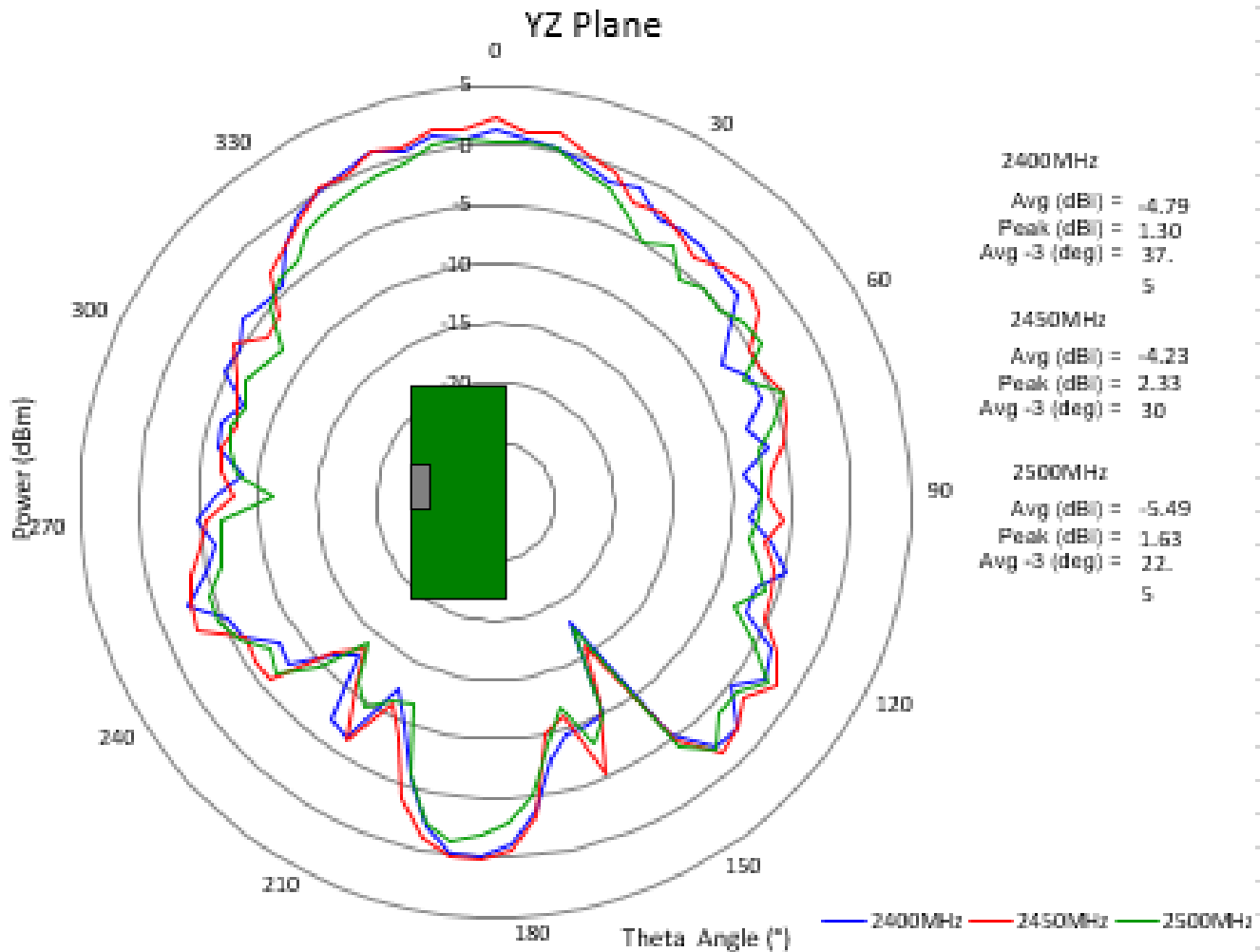
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## CHARTS

ISM 2.4GHz  
Y-Z Plane



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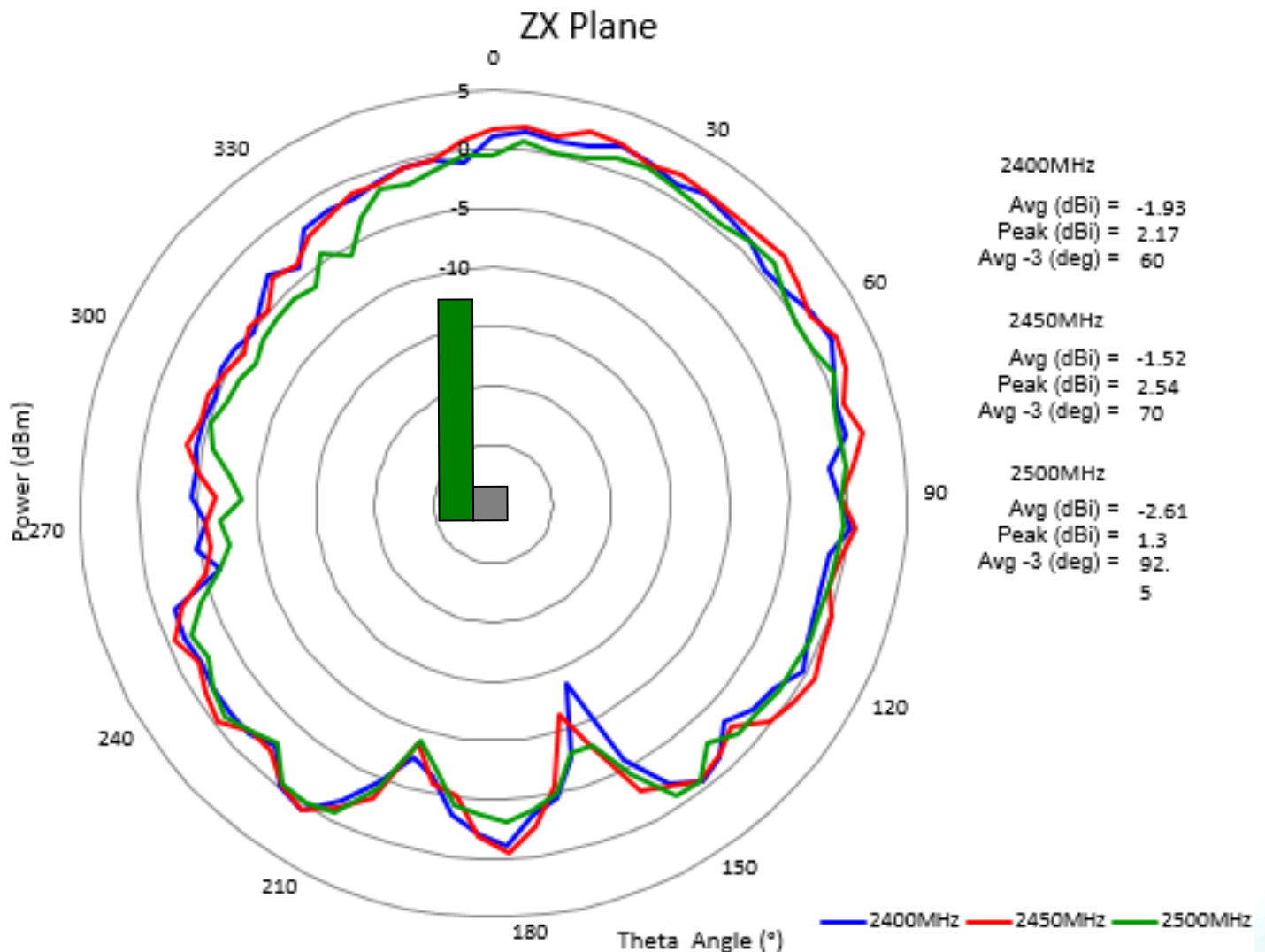
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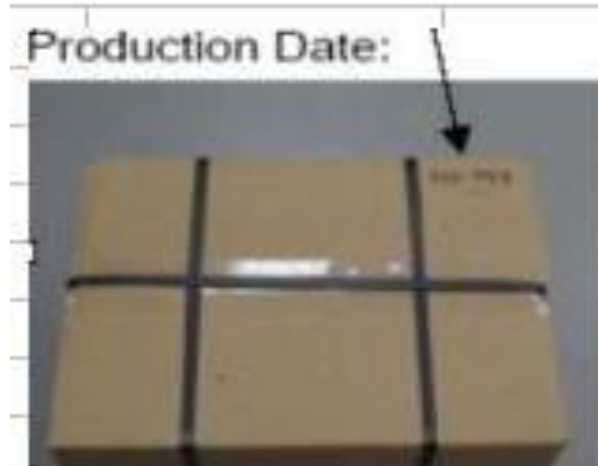
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## PACKAGING

Taping package  
1000PCS/Reel  
3000PCS/Small box  
6000PCS/Carton box



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