

Description: 2.4-2.5GHz Sheet Metal PIFA

Series: Embedded Antenna

PART NUMBER: W3317

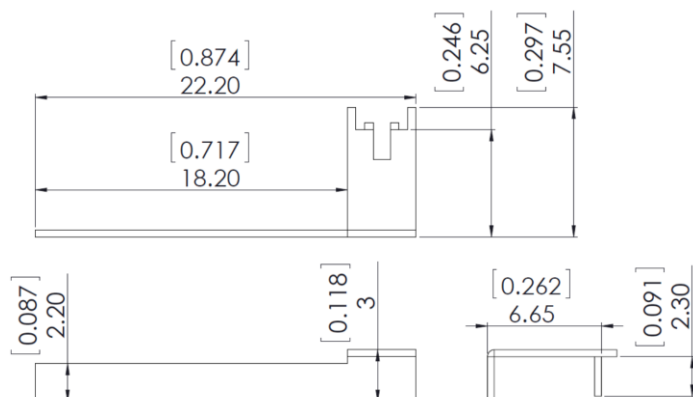
Features:

- 2400-2500MHz
- Gain 4dBi
- Radiation Efficiency 77%
- Size 22.4 x 3 x 6.25mm
- VSWR 2:1



Applications:

- Wi-Fi, Bluetooth, ZigBee
- 2.4GHz ISM band radios
- Routers, Gateways
- IoT terminals
- M2M
- Automation, security, transportation



All dimensions are in mm / inches

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ELECTRICAL SPECIFICATIONS

Frequency	2400-2500	MHz
Nominal Impedance	50	Ω
VSWR	2:1	
Average efficiency	77	%
Peak Gain	4	dBi +/- 1 dB
Polarization:	linear	
Power withstanding	5	W

Note:

1. Performance measured on standard 100x100x1mm evaluation board, refer to page 5.

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MECHANICAL SPECIFICATIONS

Material	Cu	Copper-Nickel-Zinc Alloy
Weight	0.27	g
Thickness	0.4[0.016]	mm[inch]
Overall Length	22.2[0.874]	mm[inch]

ENVIRONMENTAL SPECIFICATIONS

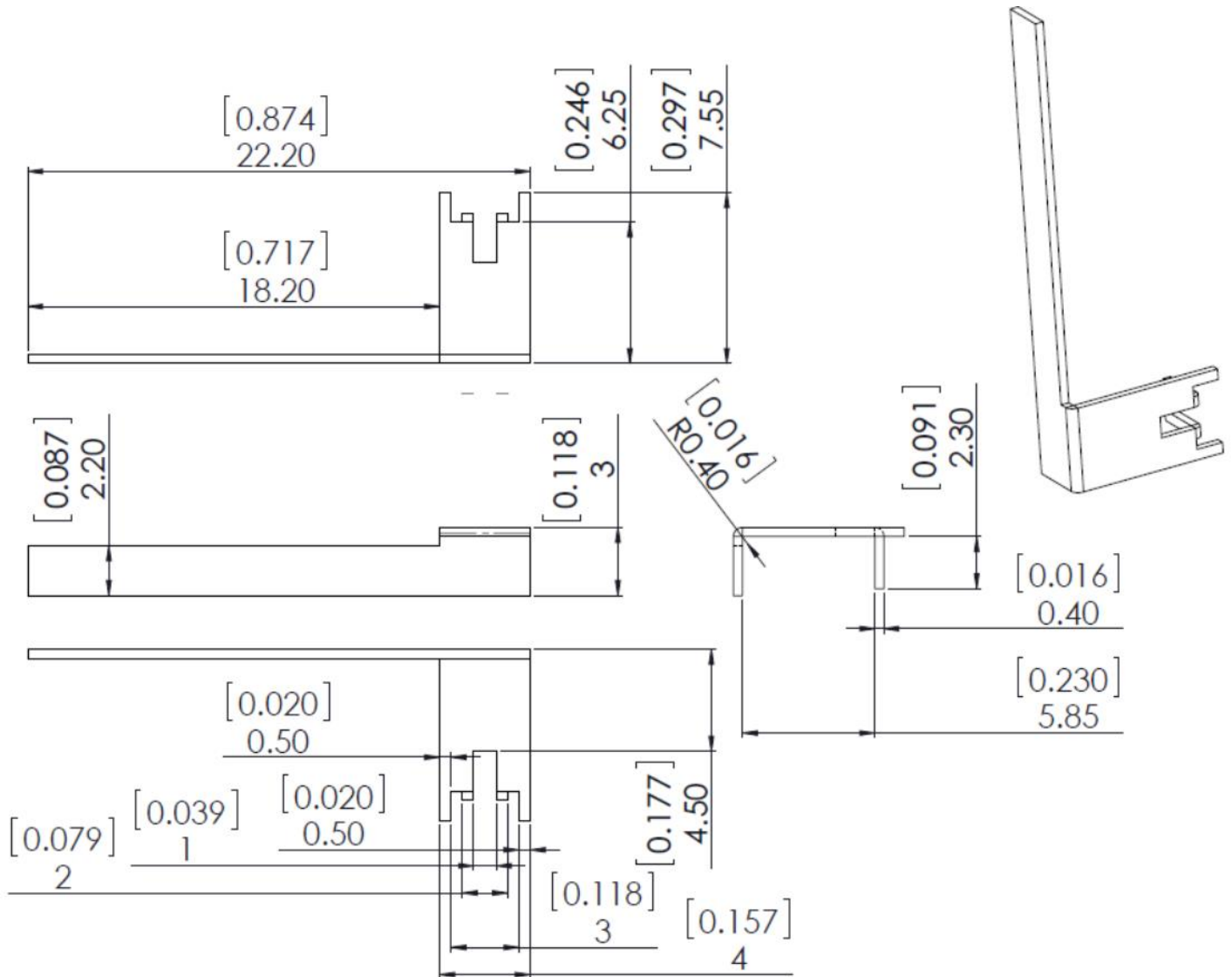
Operating temperature	-40/+105	° C
Low temperature	-30 ° C	500 hours
High temperature	+85 ° C	500 hours
Humidity	+85°C and 90-95 % r.h.	96 hours
Vibration	X&Y directions	2 hours
	Z directions	4 hours
Thermal Shock	-30 ° C /+85 ° C	5 cycles

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MECHANICAL DRAWING



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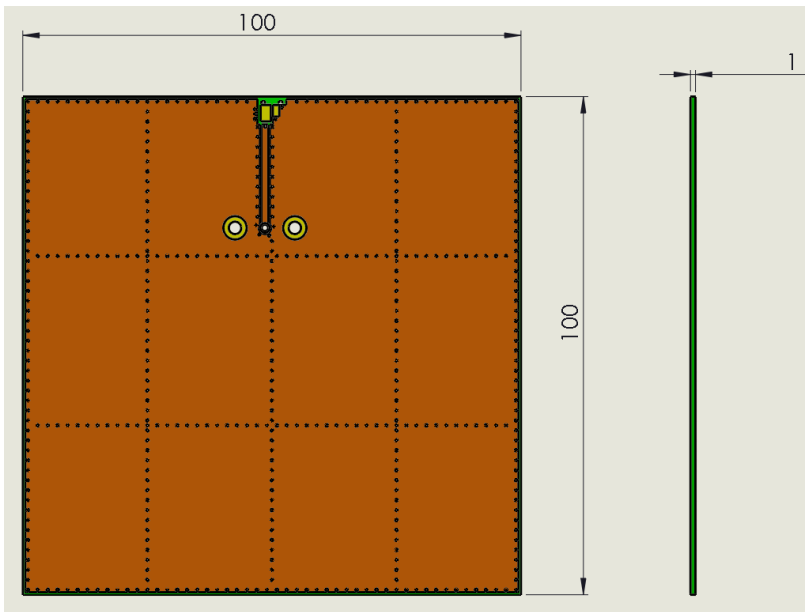
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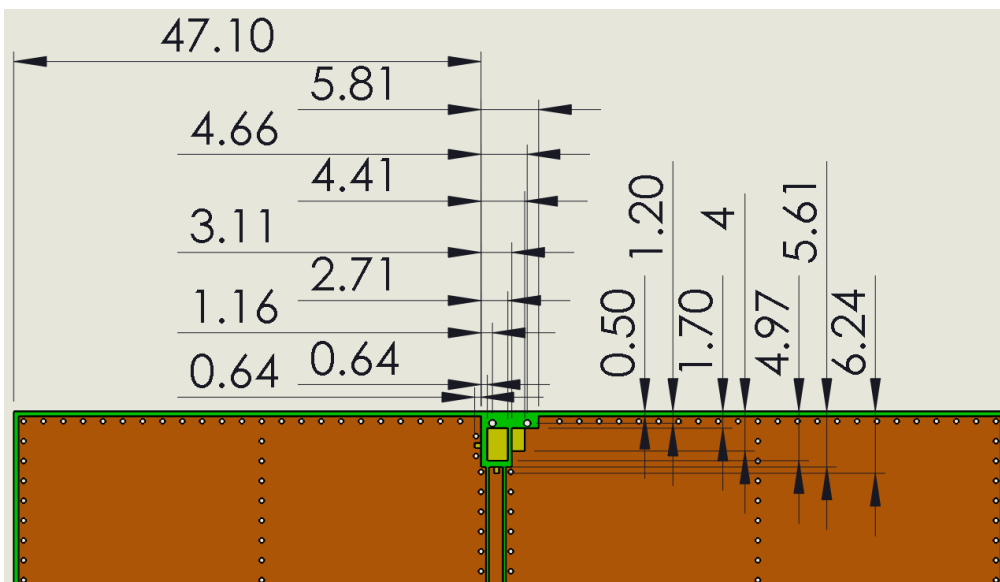
OTHER SPECIFICATIONS

PCB LAYOUT

1. PCB material, FR4, size, 100X100X1mm



2. Clearance area (Top)



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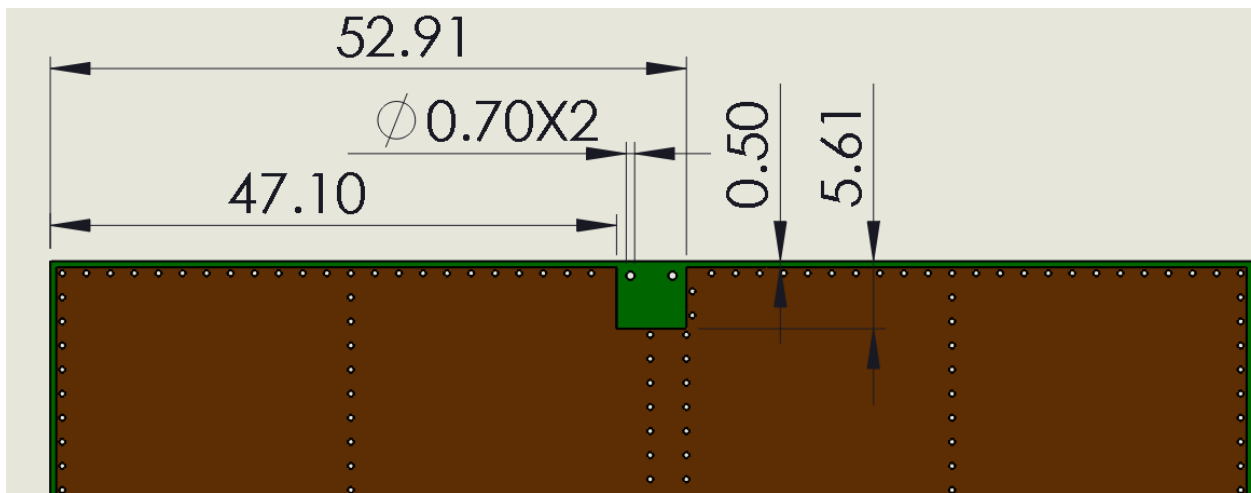
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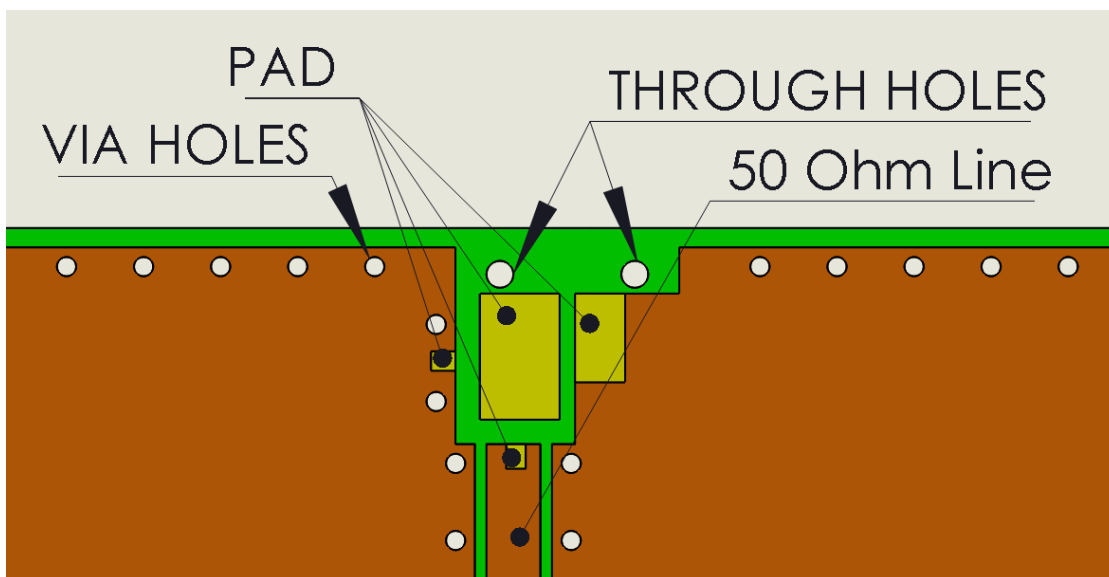
OTHER SPECIFICATIONS

PCB LAYOUT

3. Clearance area (Bottom)



4. PCB features



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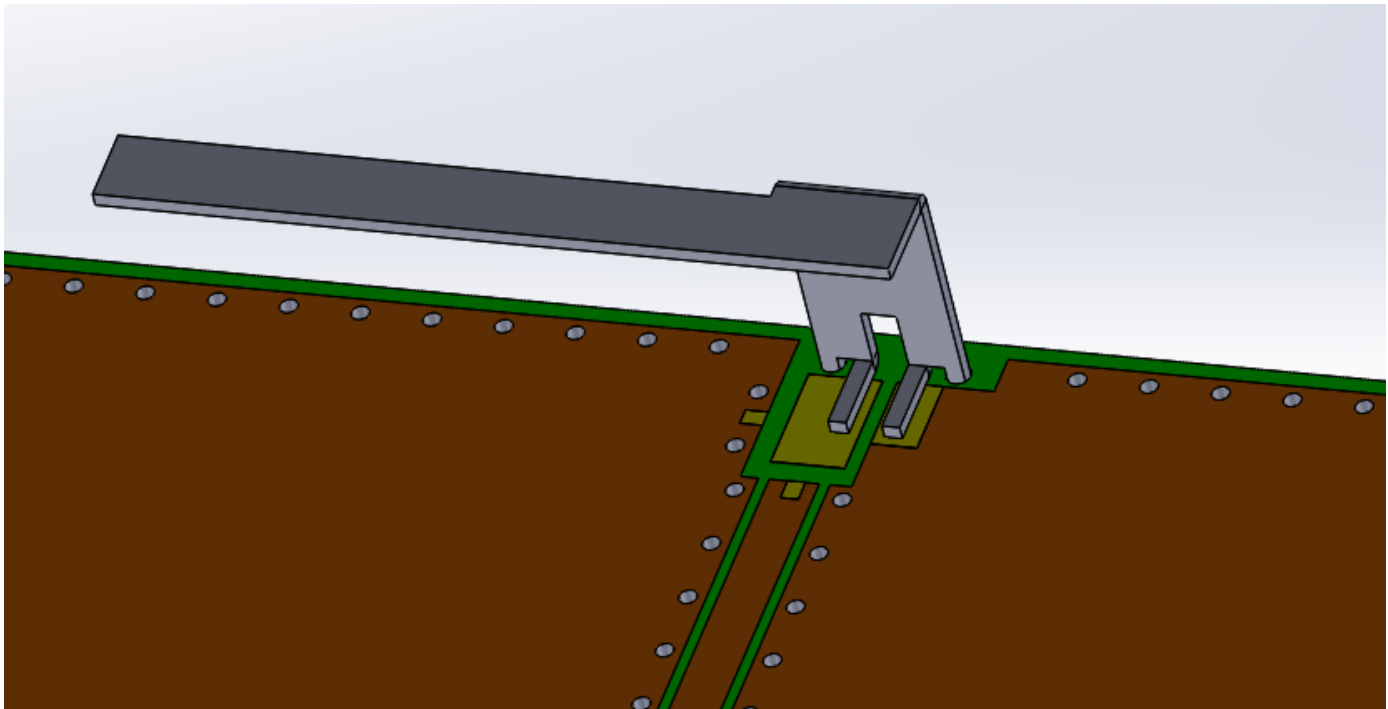
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OTHER SPECIFICATIONS

ANTENNA MOUNTING ON PCB

5, Antenna on test PCB



Others:

1. This antenna is designed for manual or semi automated assembly.
2. While soldering of the antenna it is recommend to use process jig to keep the placement of the antenna stable.

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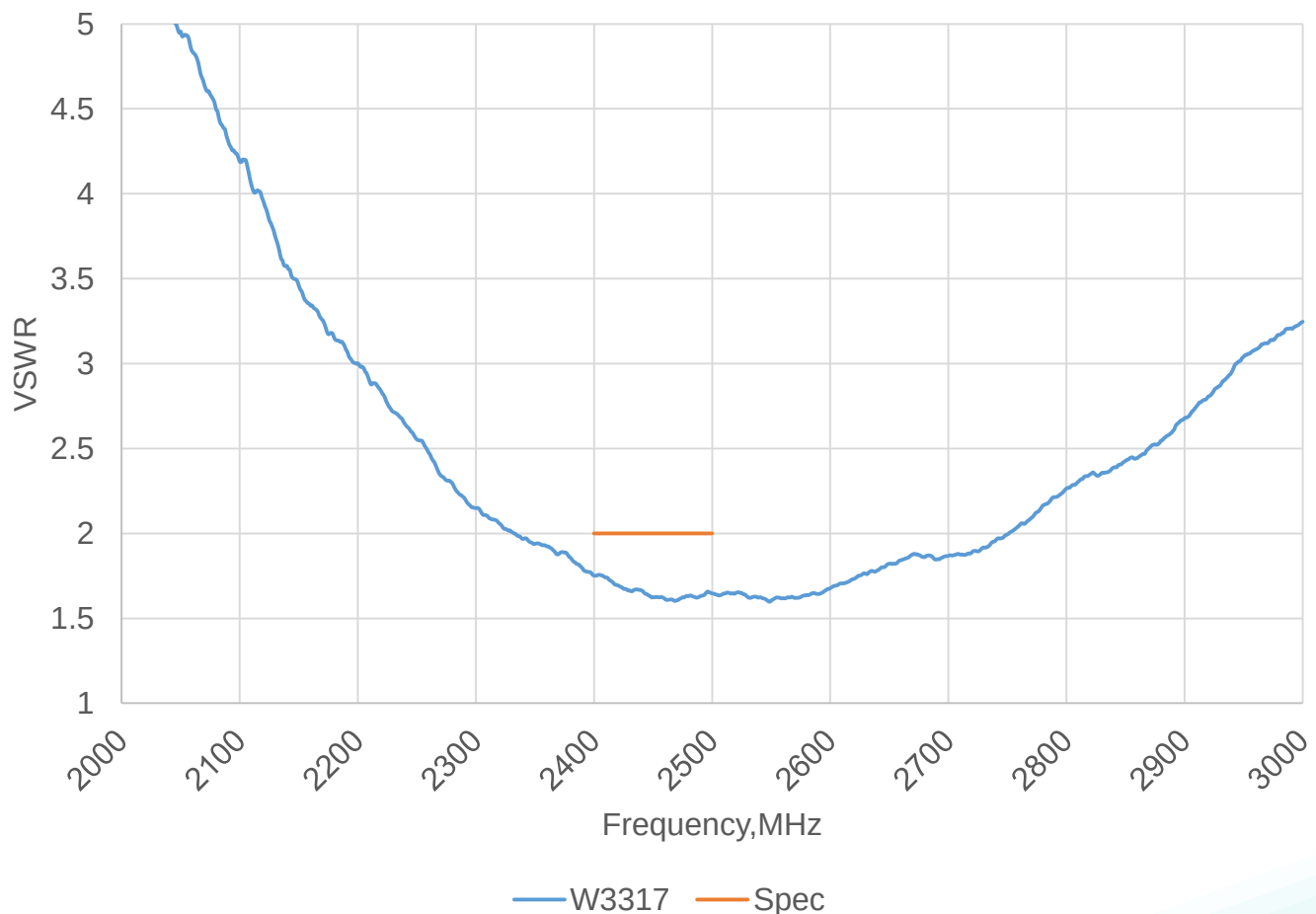
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CHARTS

VSWR

VSWR vs Frequency measured with 100mm*100mm ground
W3317 measured at Pulse Suzhou



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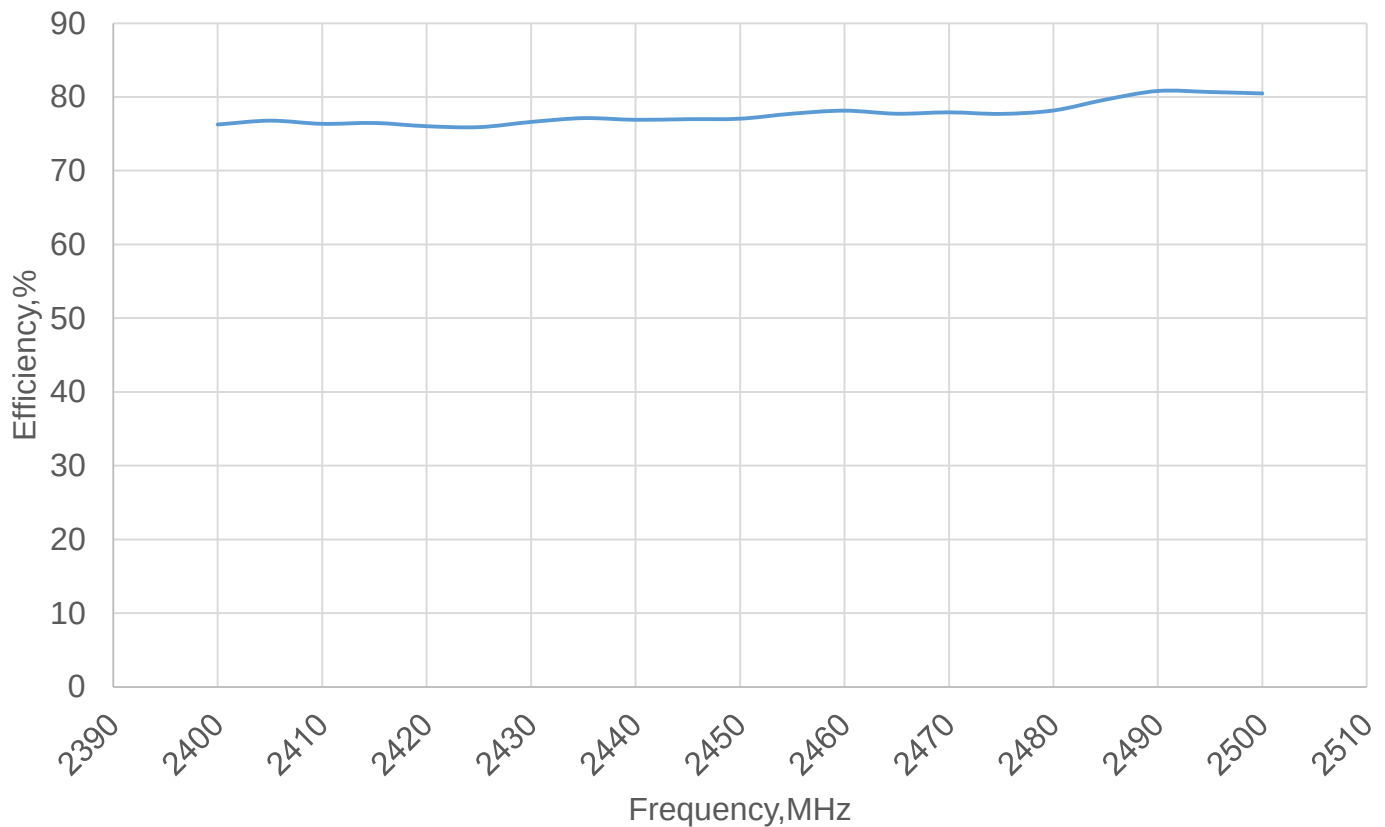
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CHARTS

Efficiency

Efficiency vs Frequency measured with 100mm*100mm ground
W3317 measured at Pulse Suzhou



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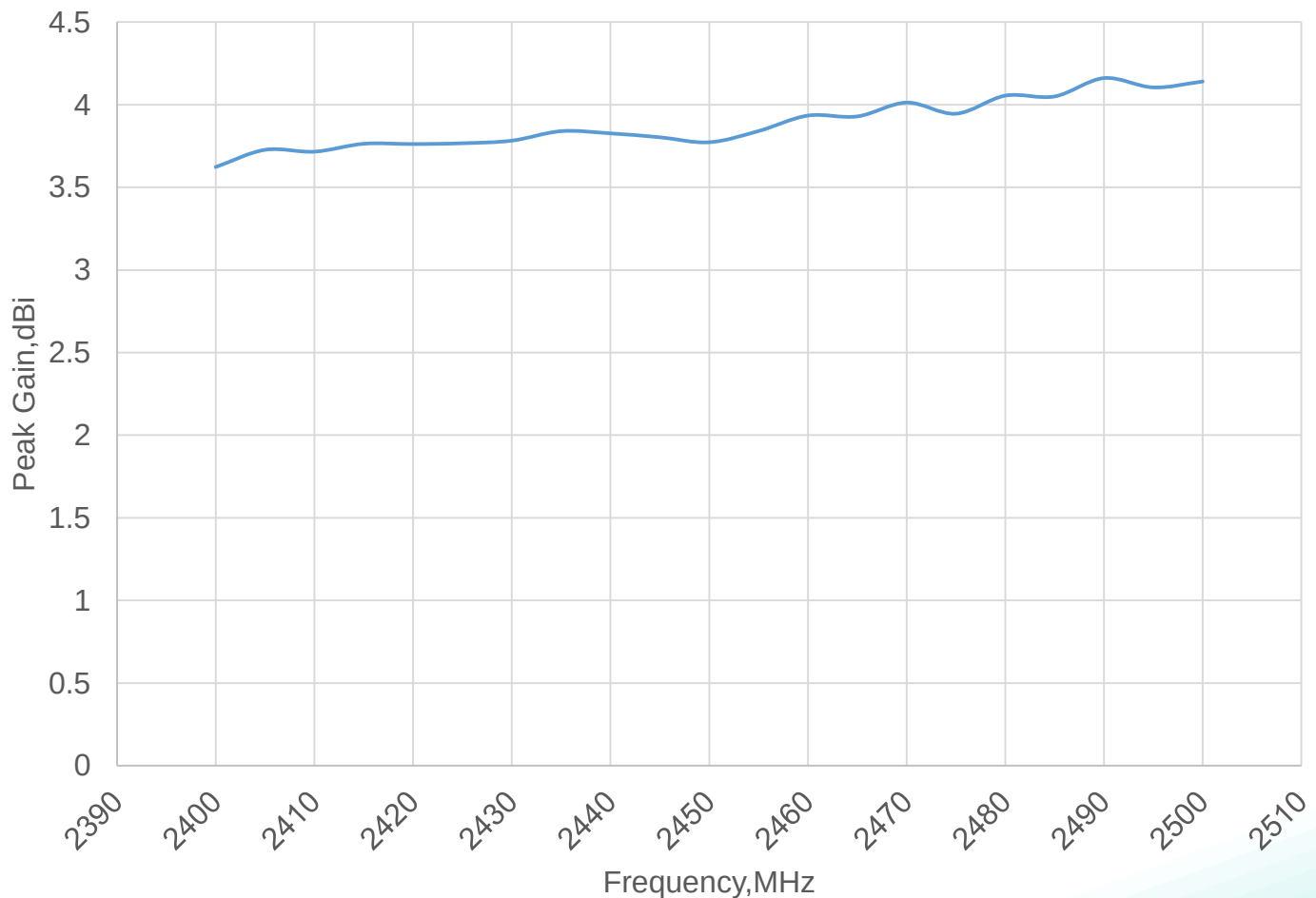
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CHARTS

Peak Gain

Peak Gain vs Frequency measured with 100mm*100mm ground
W3317 measured at Pulse Suzhou



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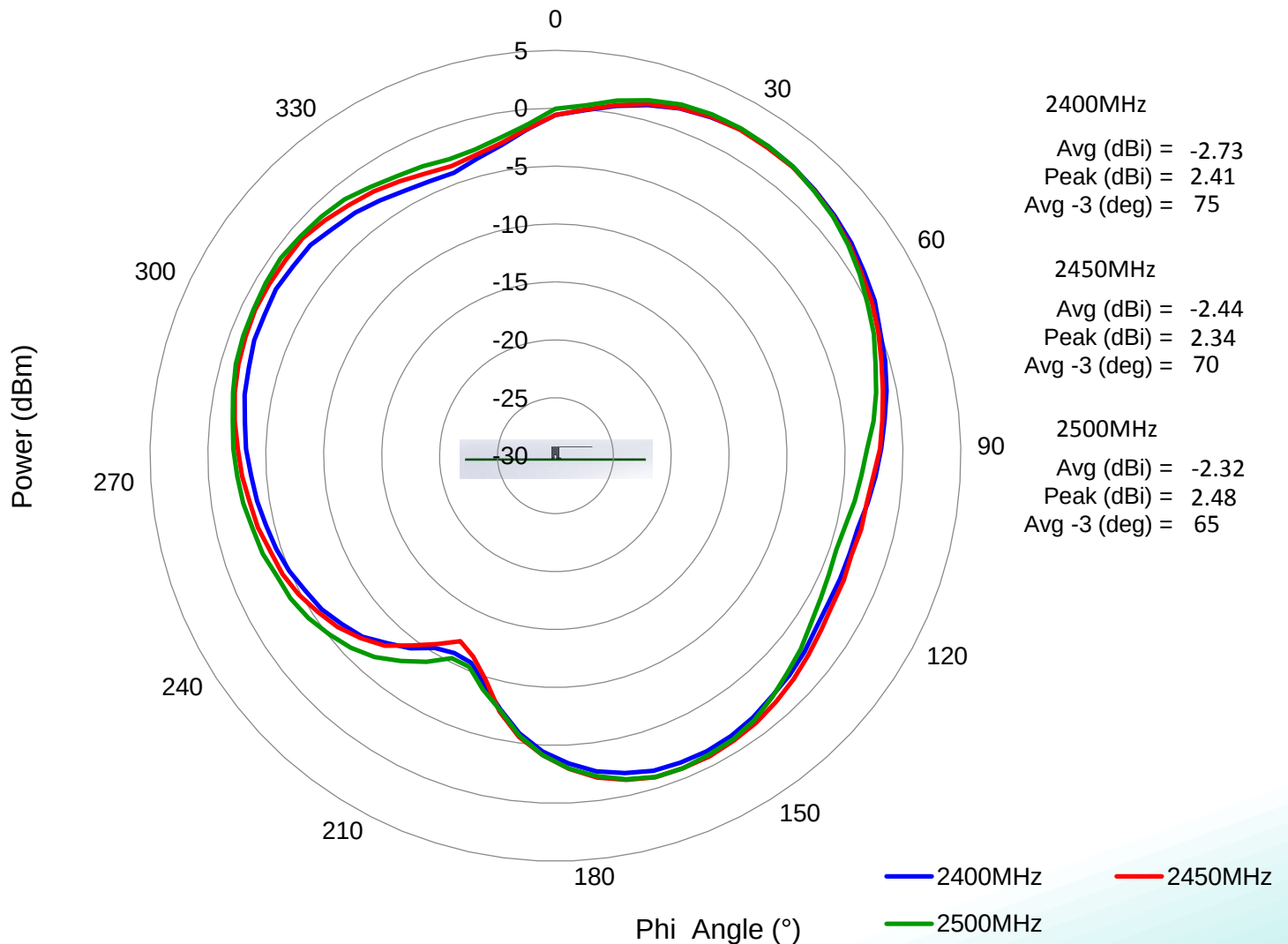
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CHARTS

Gain plots

XY Plane



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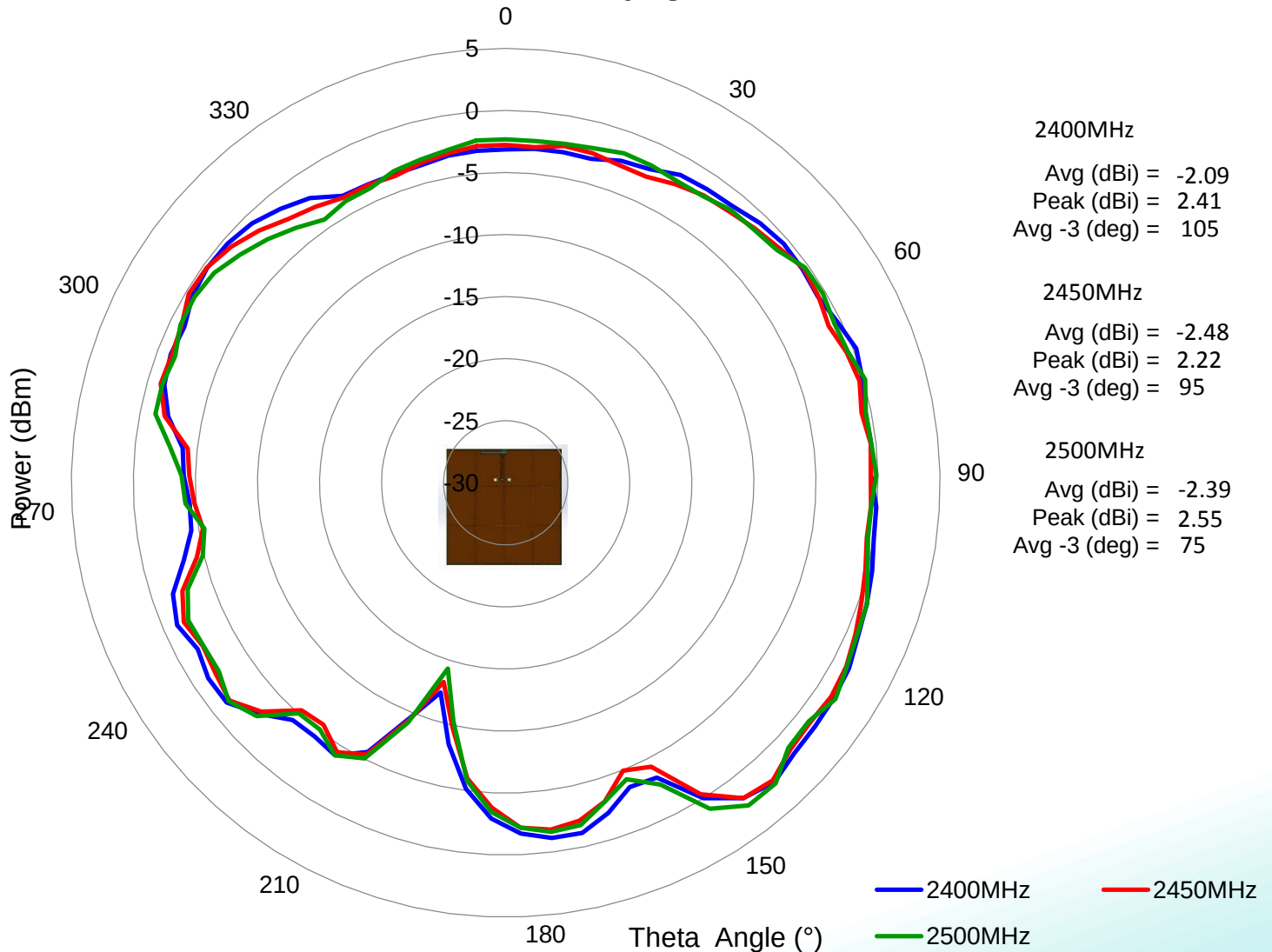
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CHARTS

Gain plots

ZX Plane



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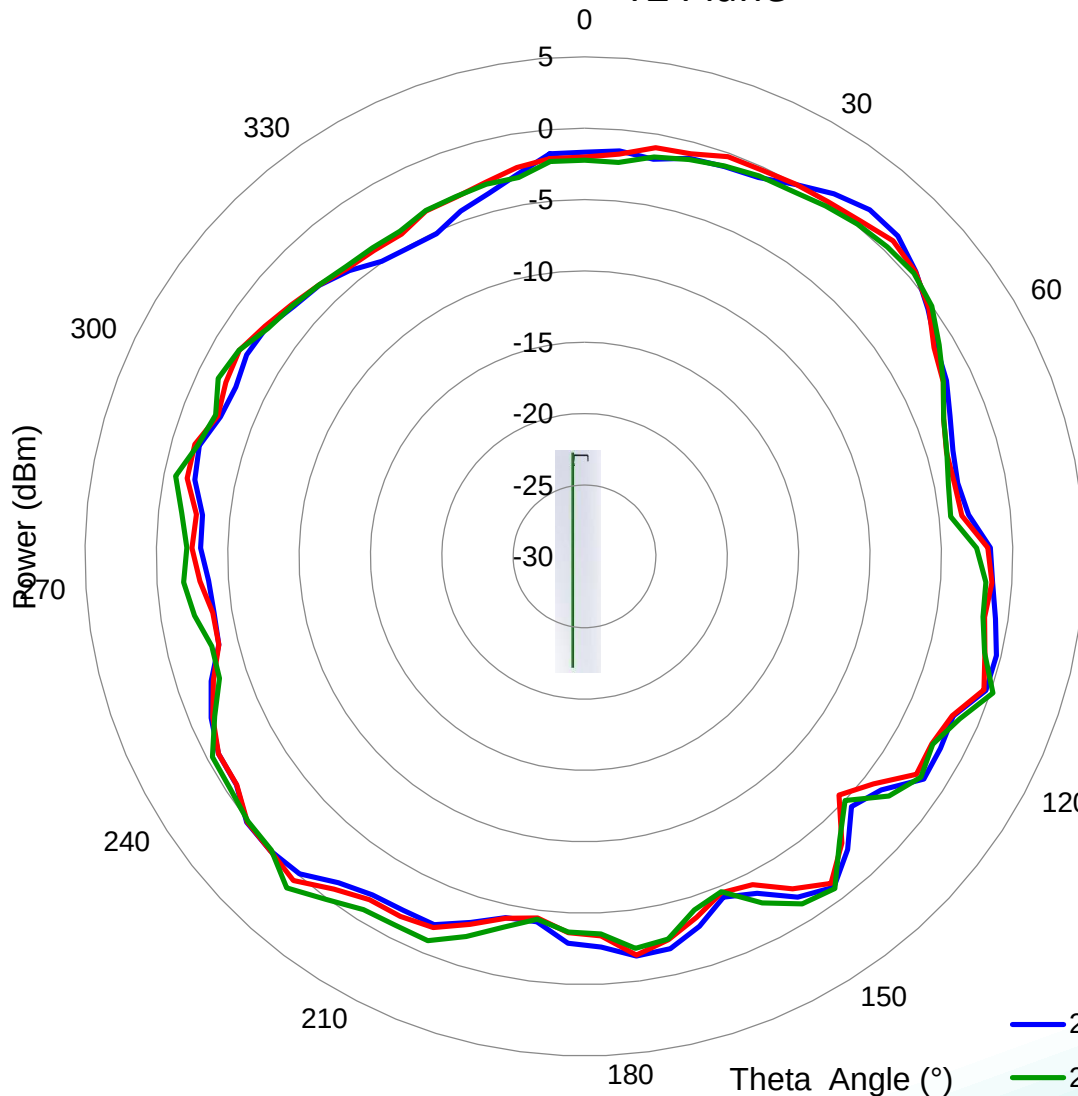
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CHARTS

Gain plots

YZ Plane



2400MHz
Avg (dBi) = -2.26
Peak (dBi) = 1.45
Avg -3 (deg) = 110

2450MHz
Avg (dBi) = -2.35
Peak (dBi) = 0.92
Avg -3 (deg) = 180

2500MHz
Avg (dBi) = -2.23
Peak (dBi) = 1.23
Avg -3 (deg) = 145

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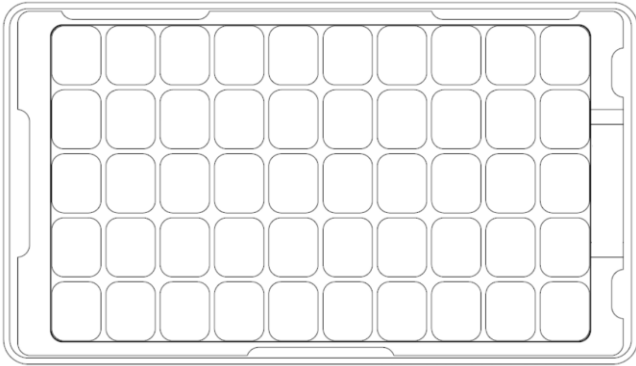
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PACKAGING

Tray packing
50PCS/Tray
2000PCS/Carton box



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