

2x2 MIMO WiFi 6E Antenna

FPCB Antenna

W6109B0100 – 2.4 to 2.48 GHz/5.15 to 7.125GHz



Features & Applications:

-  FPCB with adhesive
-  Size 34.6x7.6mm
-  1.13mm cable with U.FL Compatible
-  RoHS Compliant
-  WiFi 6E, WiFi 7

ELECTRICAL SPECIFICATIONS @ 25°C

General Specifications

Antenna type	Nominal Impedance	Polarization	Radiation pattern		Power withstanding
Dipole	50Ω	Linear	Omni		1W
Frequency (MHz)		2400-2480		5150-7125	
Return Loss(dB)		<7		<7	
Peak Gain (dBi)		3.2		6.9	
Efficiency (%)		49.9		86.9	

MECHANICAL SPECIFICATIONS

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Dimension (Length x Width)	Material	Color	Cable type	Connector Type	Cable length
34.6mm x 7.6mm	FPCB	Black	1.13 coaxial cable	U.FL Compatible	100mm
Thickness	Weight				
2.3mm	0.724g				

ENVIRONMENTAL SPECIFICATIONS

W6109B0100

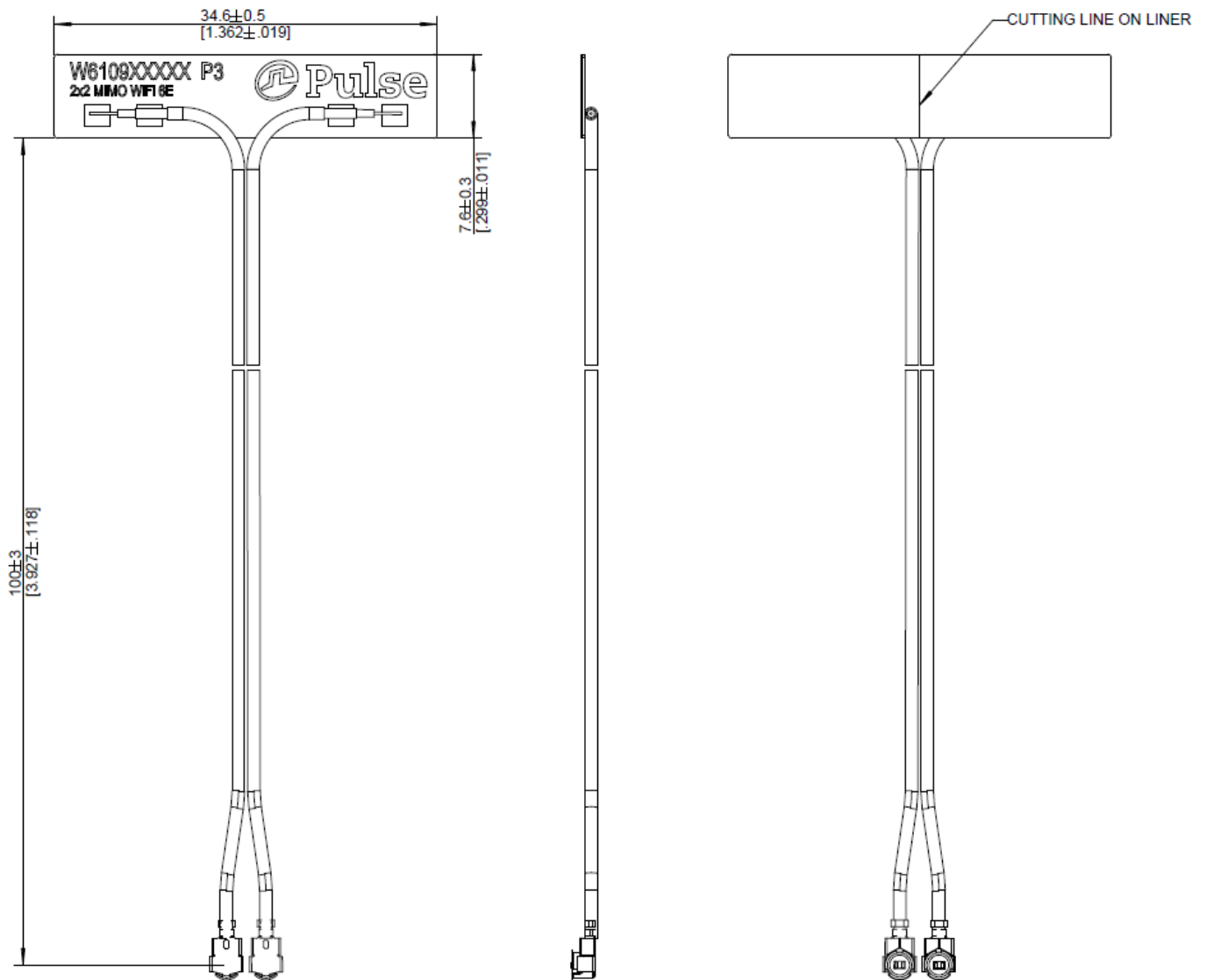
Storage Temperature	Operating Temperature	Ingress Protection	RoHS Compliant
-40/+85° C	-40/+85° C	N/A	Yes

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Mechanical Drawing

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Test Setup

Dimensions: MM/inches Unless otherwise specified, all tolerances are ± 0.010 (0.25mm)

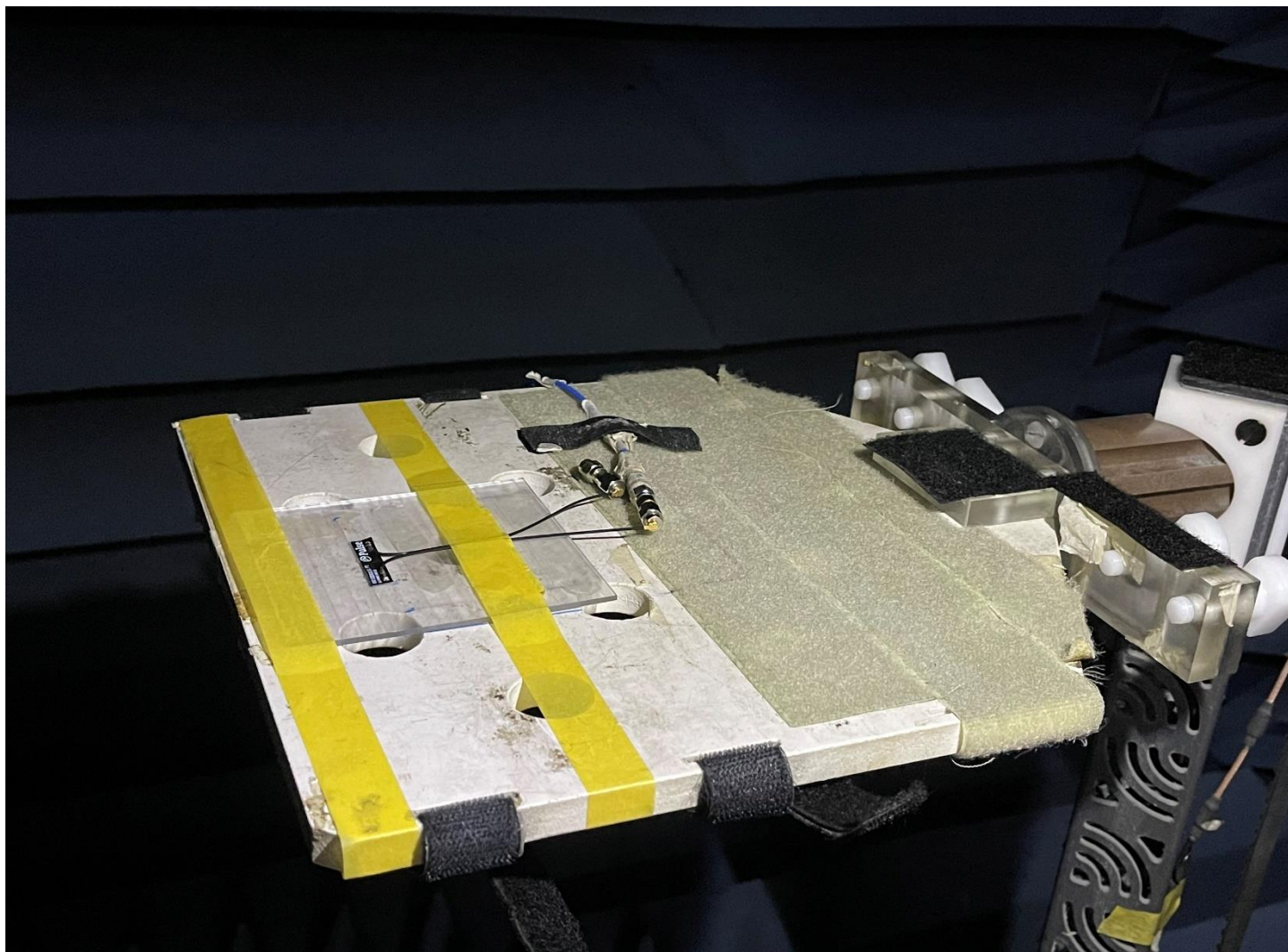
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General / Chamber Setup

- Measured at Pulse YP (ETS Lindgren Chamber)
- Test data measured with 100mm cable W6109B0100
- Antenna mounted on 2mm thick PC plate
-

Measurement setup

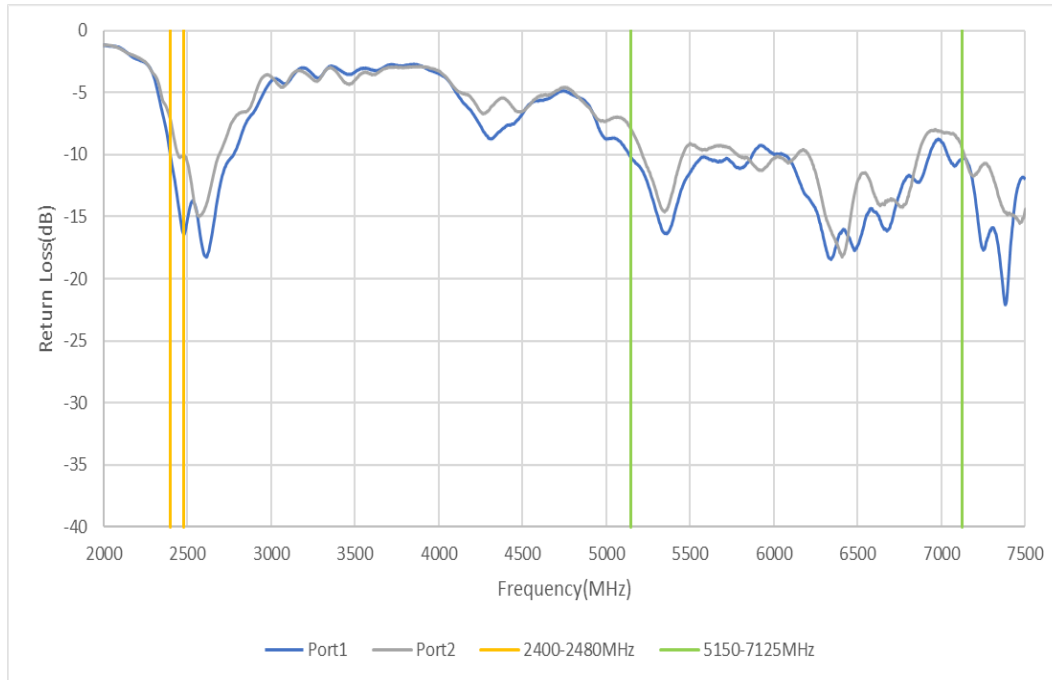


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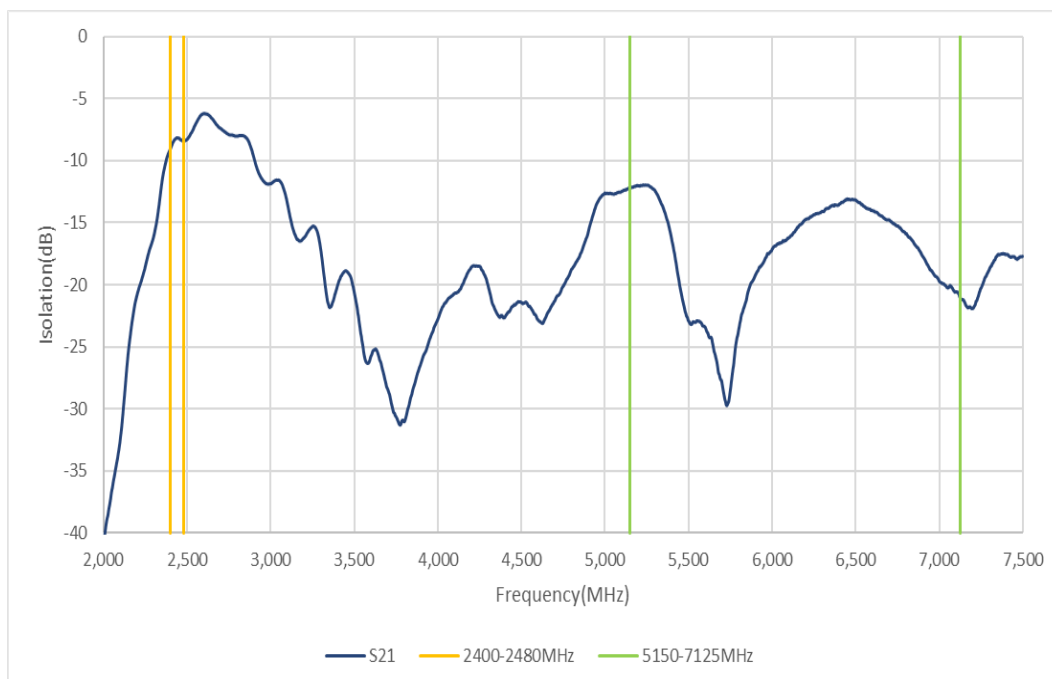
Charts – Return Loss

Test data



Charts - Isolation

Test data

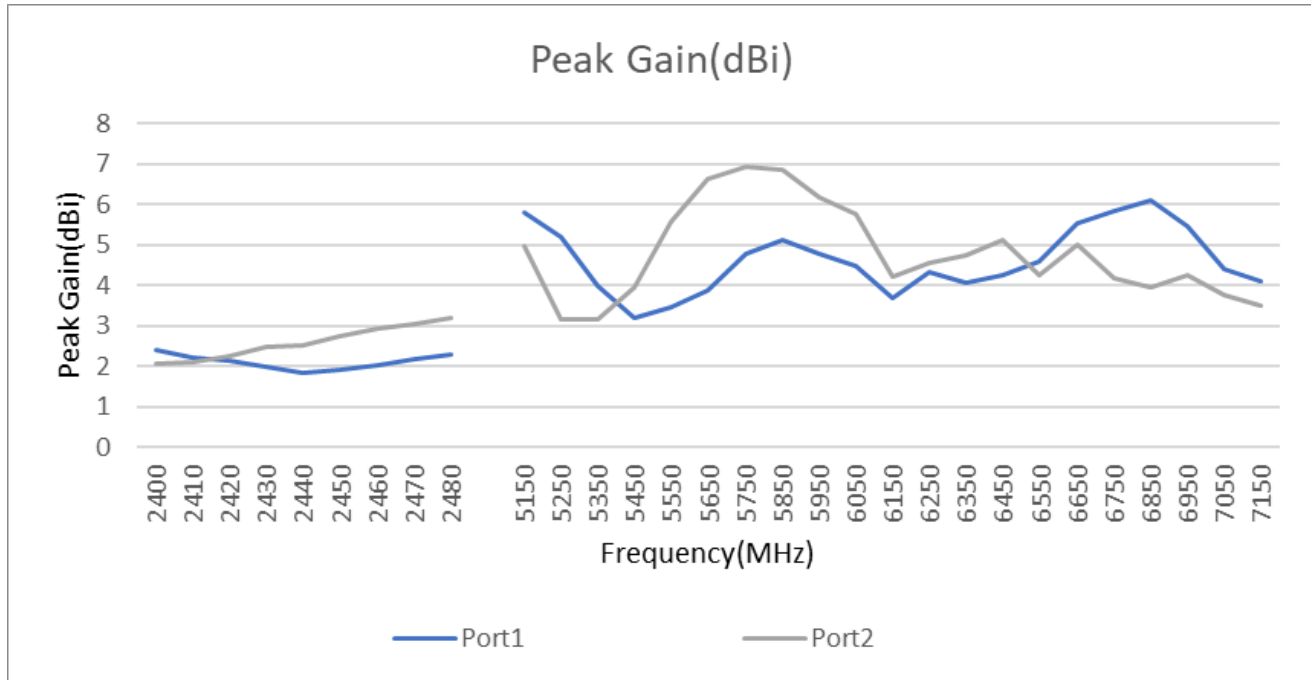


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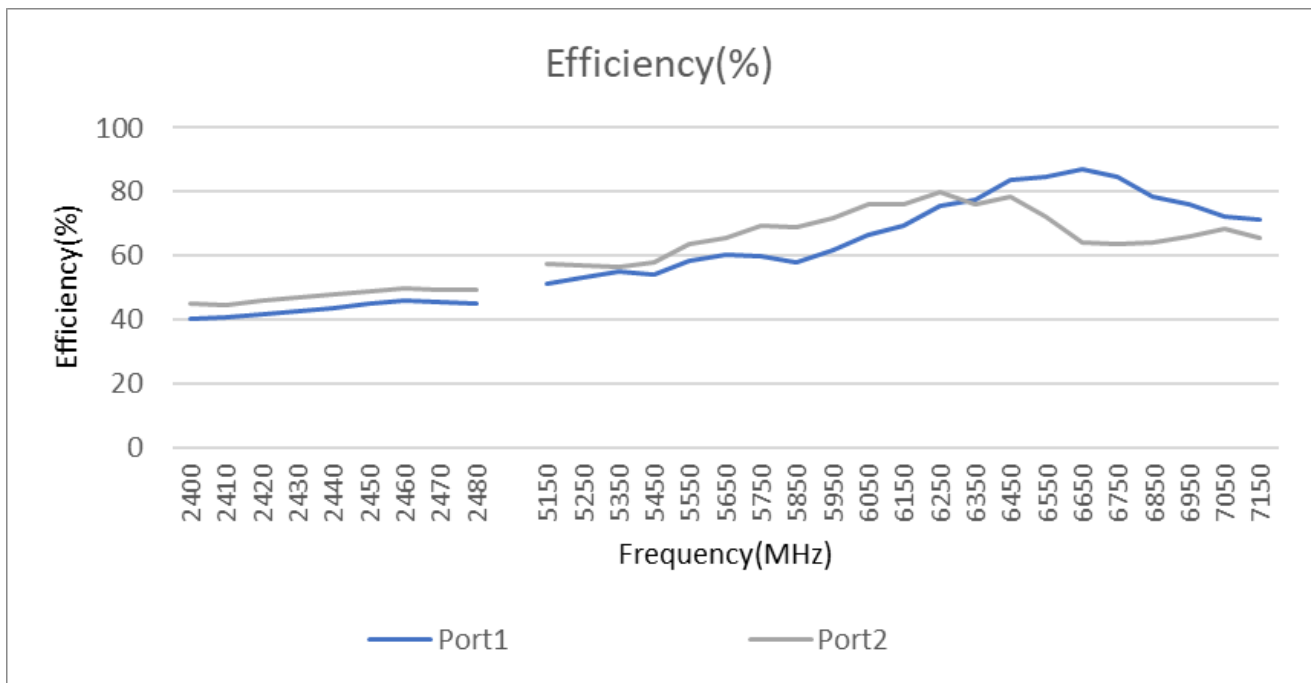
Charts – Peak Gain(dBi)

Test data



Charts – Efficiency(%)

Test data

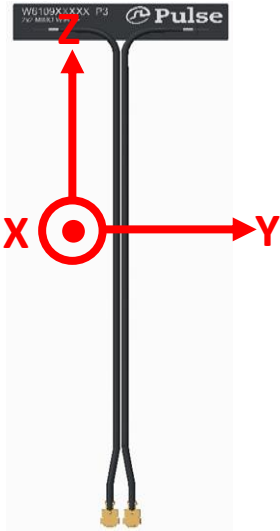


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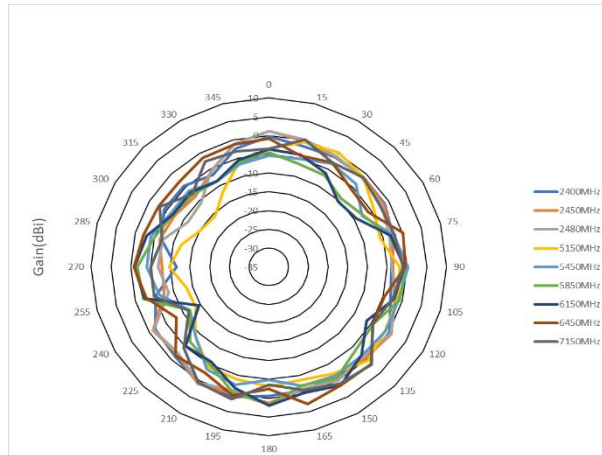
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Radiation Pattern – XY and XZ Gain Plots

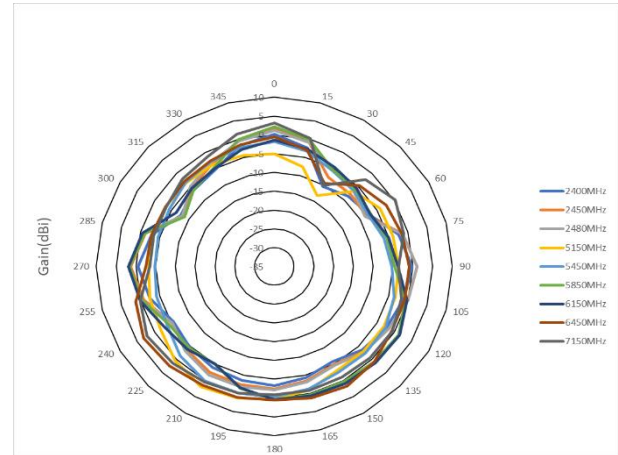
Test data



XY Plane



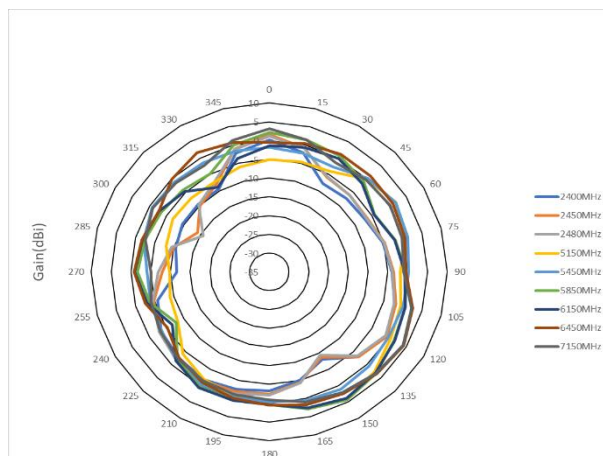
XZ Plane



Radiation Pattern – YZ Gain Plots

Test data

YZ Plane

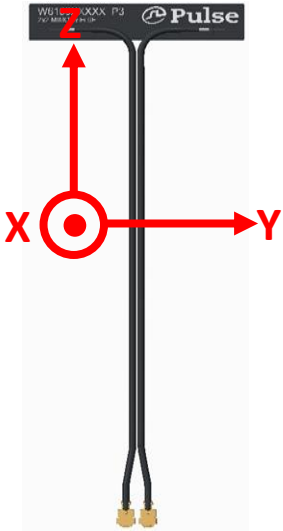


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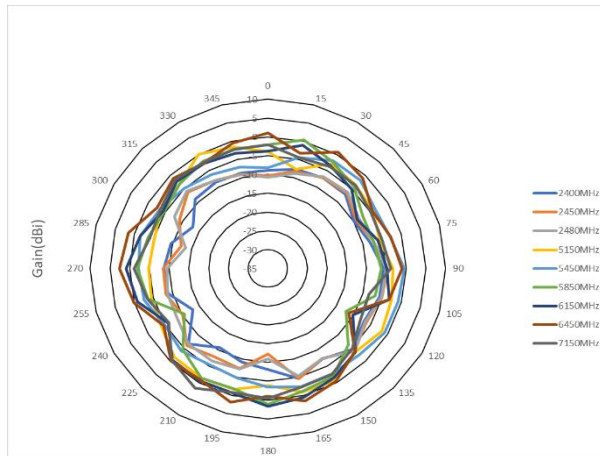
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Radiation Pattern – XY and XZ Gain Plots

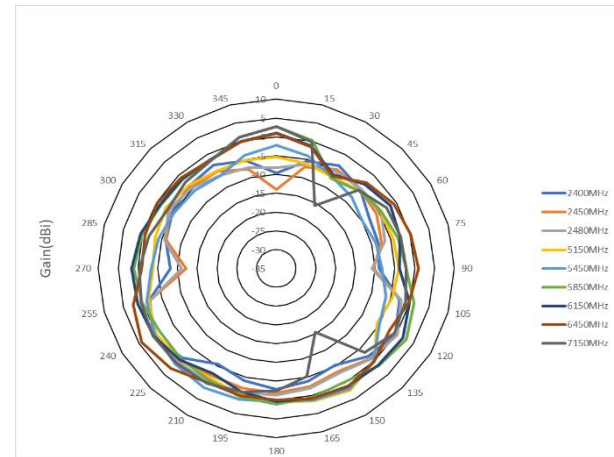
Test data



XY Plane



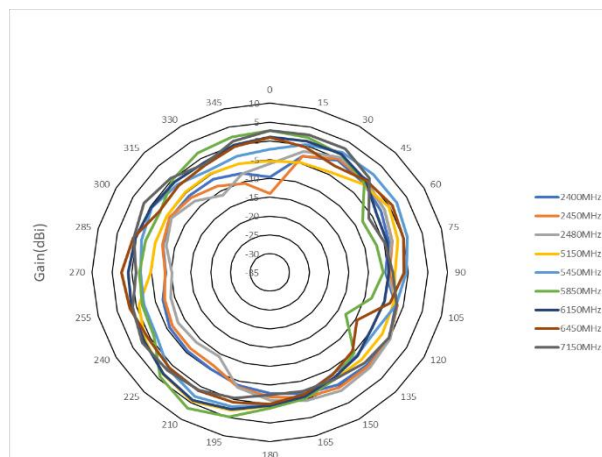
XZ Plane



Radiation Pattern – YZ Gain Plots

Test data

YZ Plane



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PACKAGING

W6109B0100

10PCS/PE bag
10 PE bag/foam bag
50 foam bag/ carton box
Total 5000PCS/Carton box
Package box: 4600mm*235mm*140mm



For More Information:

Americas - antennas.us@pulseelectronics.com | Europe – antennas.eu@pulseelectronics.com | Asia – antennas.as@pulseelectronics.com | Questions? +1-800-ANTENNA
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