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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

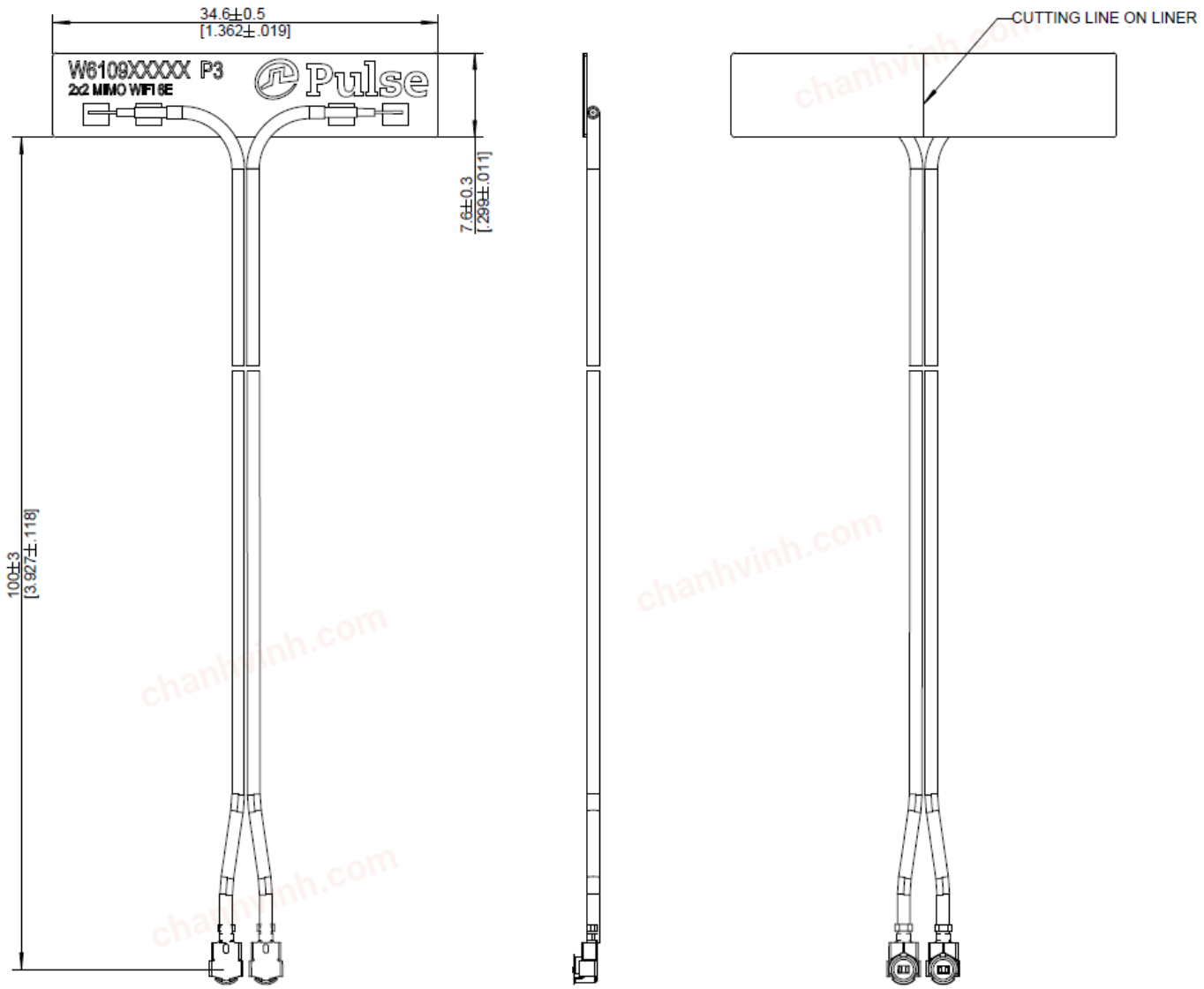
MECHANICAL SPECIFICATIONS					
W6109B0100					
Dimension (Length x Width)	**Material**	**Color**	**Cable type**	**Connector Type**	**Cable length**
34.6mm x 7.6mm	FPCB	Black	1.13 coaxial cable	U.FL Compatible	100mm
Thickness	**Weight**				
2.3mm	0.724g				

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

W6109B0100



Test Setup

Dimensions: MM/inches Unless otherwise specified, all tolerances are ±.010 (0.25mm)

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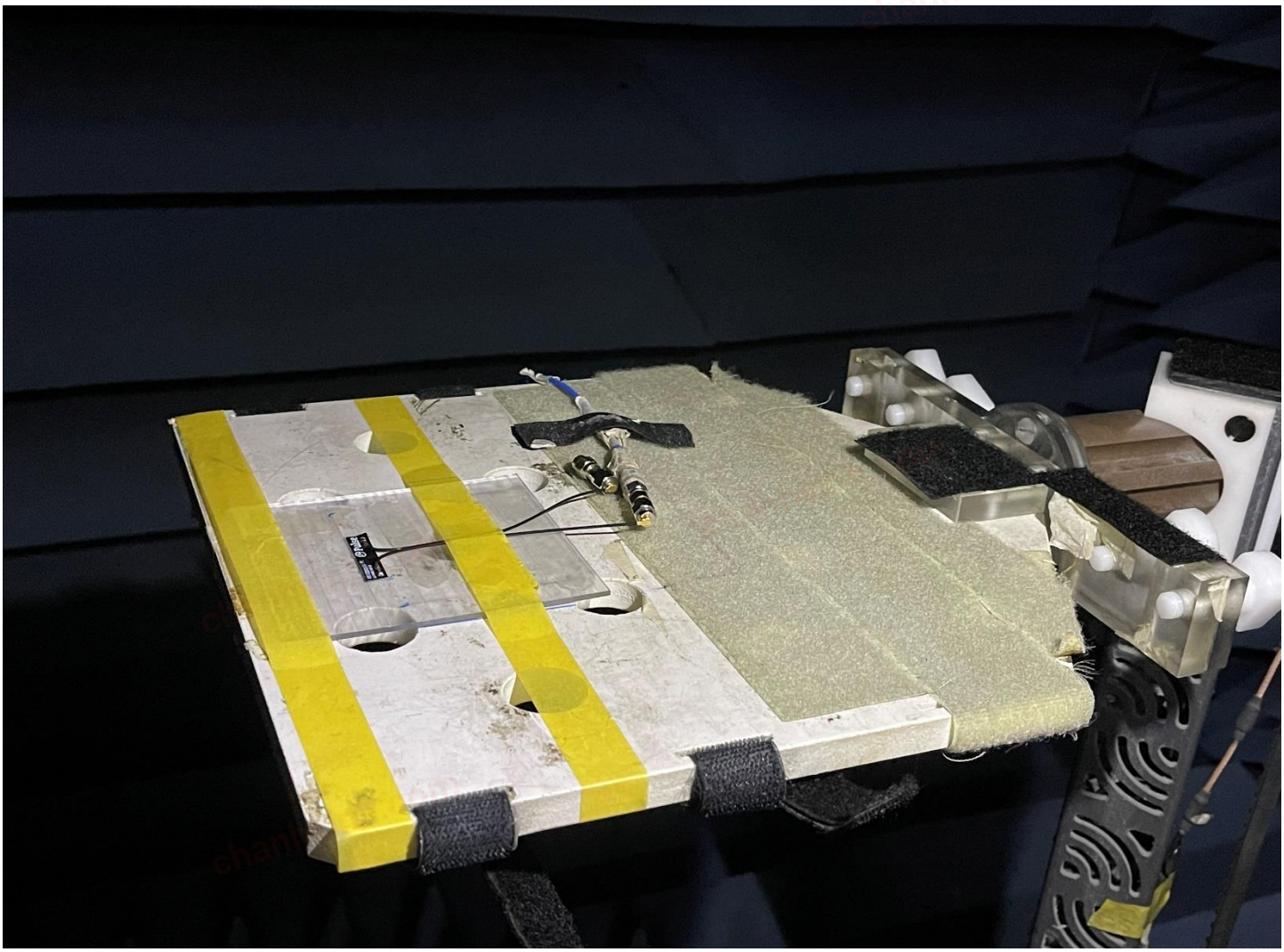
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General / Chamber Setup

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

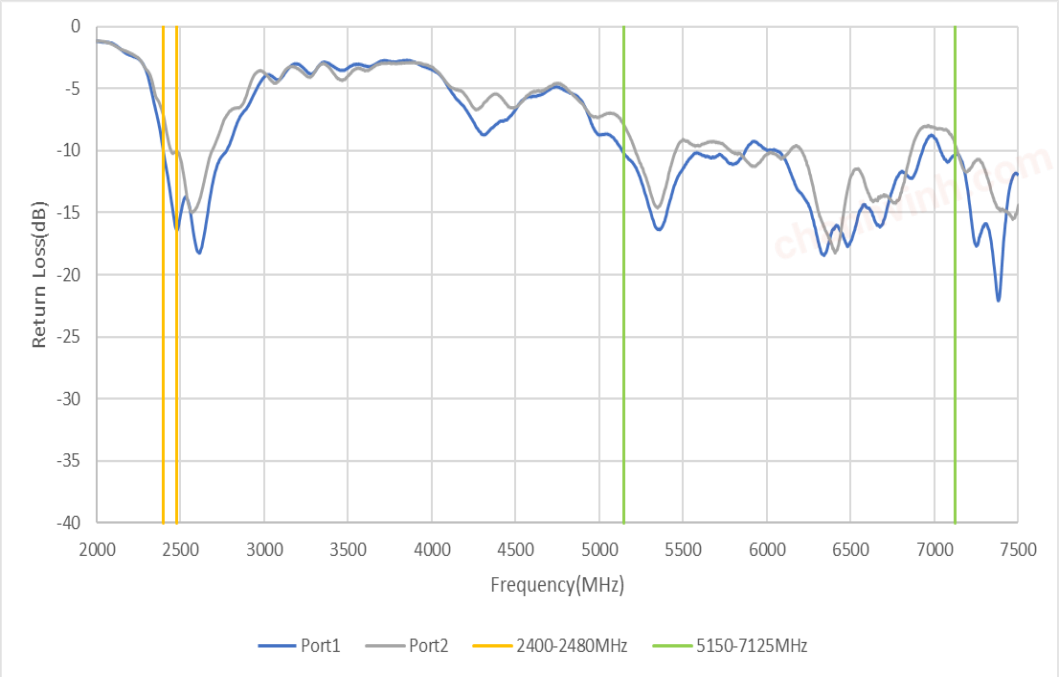
Measurement setup



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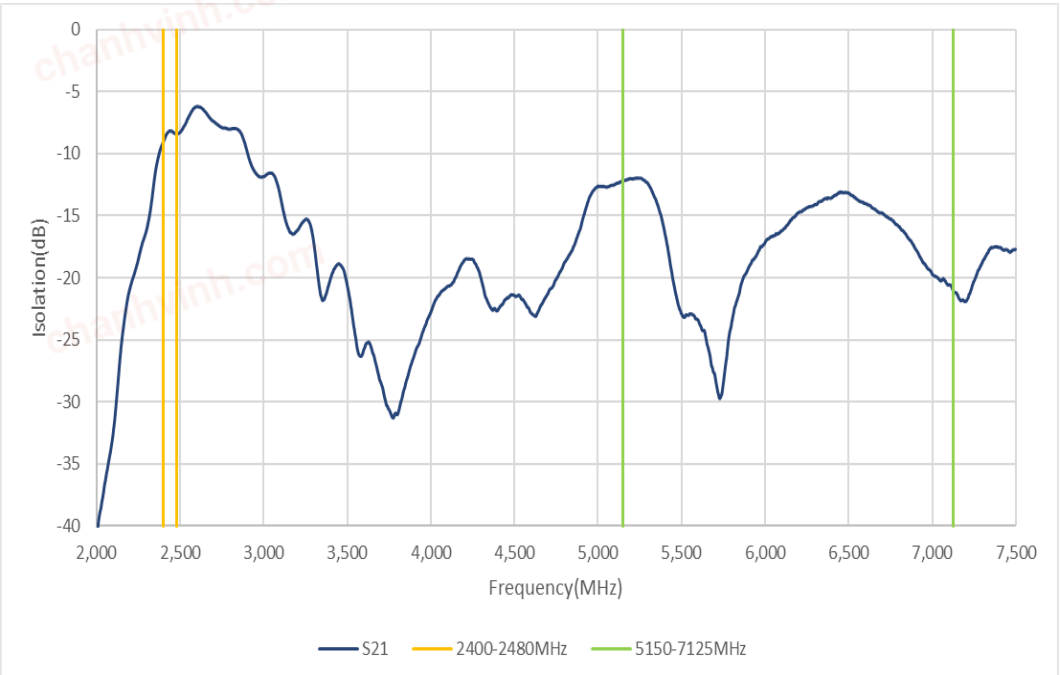
Charts – Return Loss

Test data



Charts - Isolation

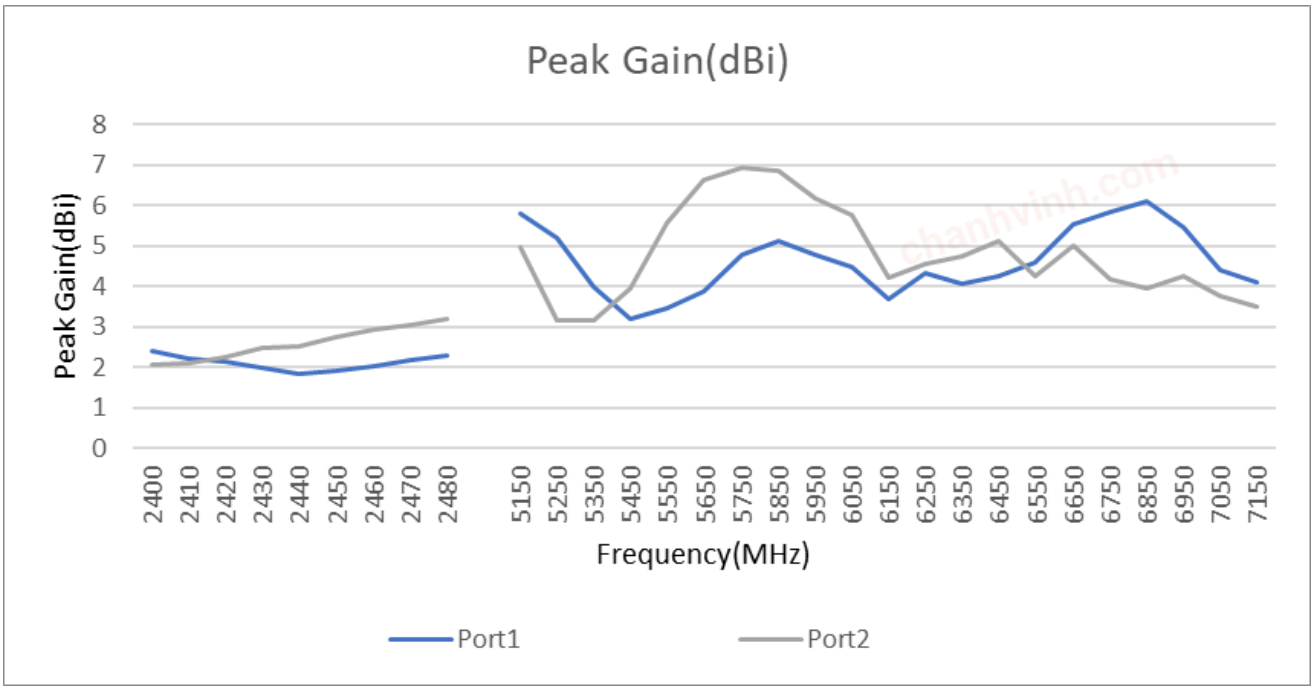
Test data



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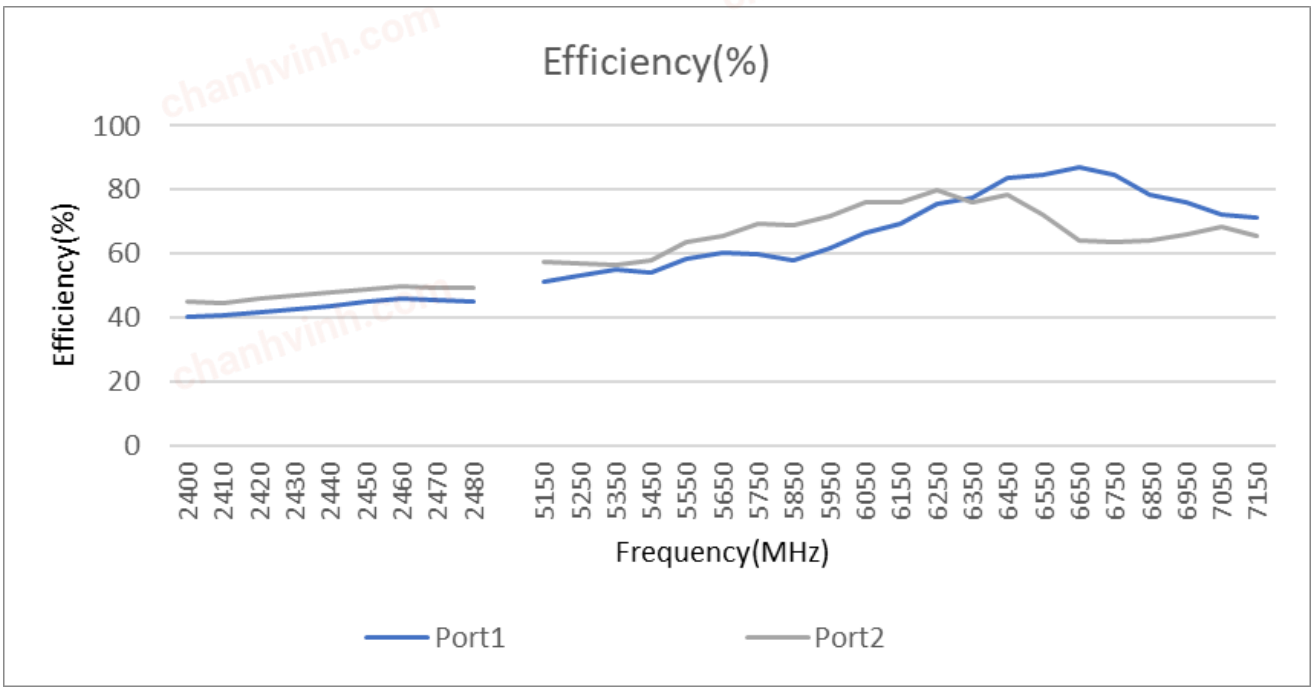
Charts – Peak Gain(dBi)

Test data



Charts – Efficiency(%)

Test data

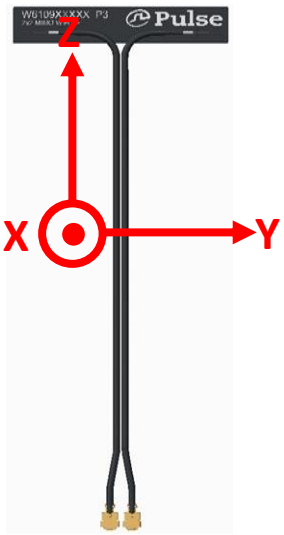


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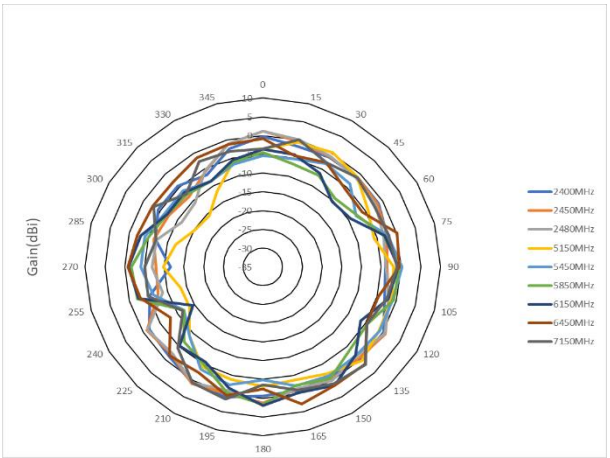
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Radiation Pattern – XY and XZ Gain Plots

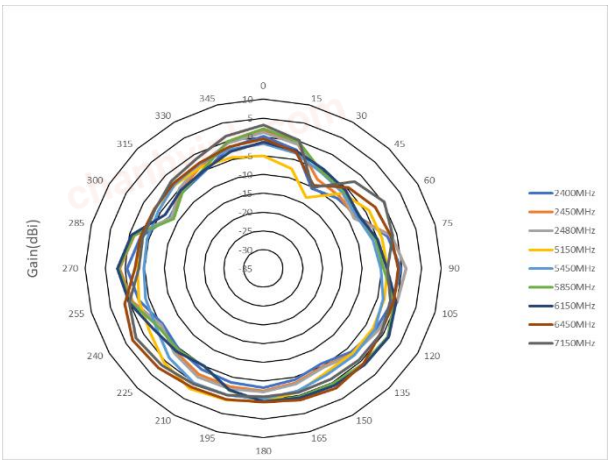
Test data



XY Plane



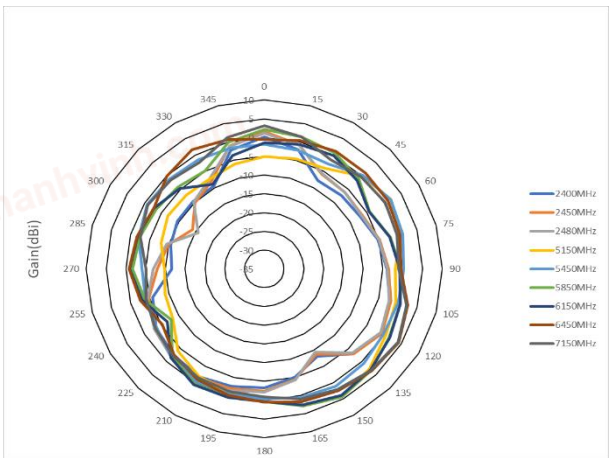
XZ Plane



Radiation Pattern – YZ Gain Plots

Test data

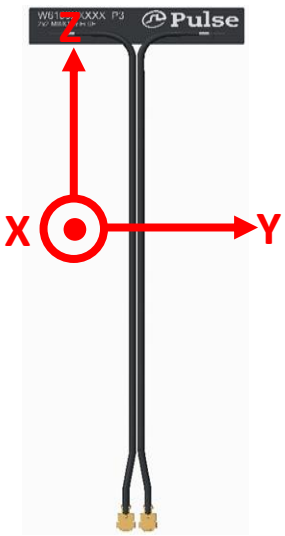
YZ Plane



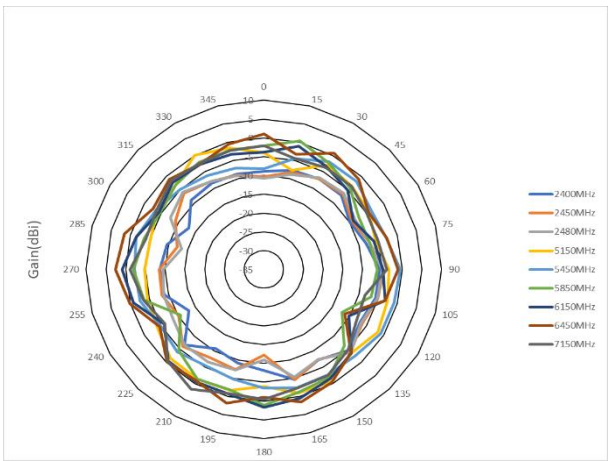
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Radiation Pattern – XY and XZ Gain Plots

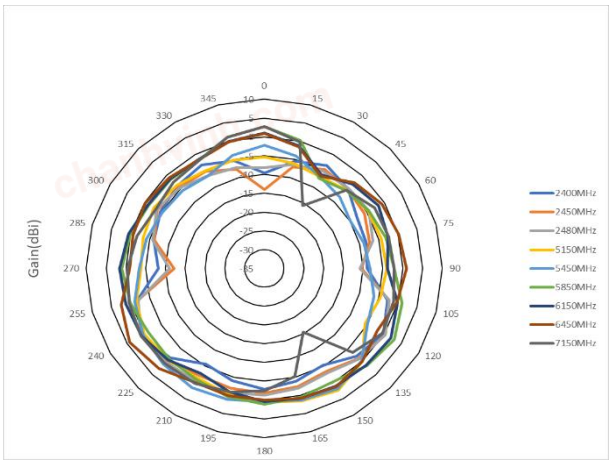
Test data



XY Plane



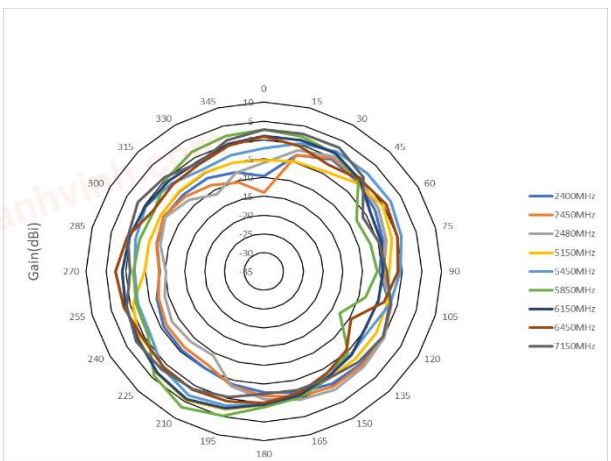
XZ Plane



Radiation Pattern – YZ Gain Plots

Test data

YZ Plane



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PACKAGING

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



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