Metal Surface Mount WiFi Antenna

TWA422CC01 – 2.4 to 2.5 GHz/5.15 to 5.85GHz

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Features & Applications:

- *WiFi antenna is designed for use on metal surface*
- *FPCB with adhesive*
- *Size 29x26.4x2.45mm*
- *1.13mm cable with I-PEX MHF 4L*
- *RoHS Compliant*

ELECTRICAL SPECIFICATIONS @ 25°C				
General Specifications				
Antenna type	**Nominal Impedance**	**Polarization**	**Radiation pattern**	**Power withstanding**
PIFA	50Ω	Linear	Omni	1W

Frequency (MHz)	2400-2500	5150-5850
Return Loss(dB)	<-7	<-9
Peak Gain (dBi)	1.75	5.72
Efficiency (%)	36	50

MECHANICAL SPECIFICATIONS						
TWA422CC01						
Dimension (Length x Width x Height)	**Material**	**Color**	**Cable Type**	**Connector Type**	**Cable length**	**Weight**
29mm x 26.4mm x 2.45mm	FPCB	Black	1.13 coaxial cable	I-PEX MHF 4L	95mm	1.97g

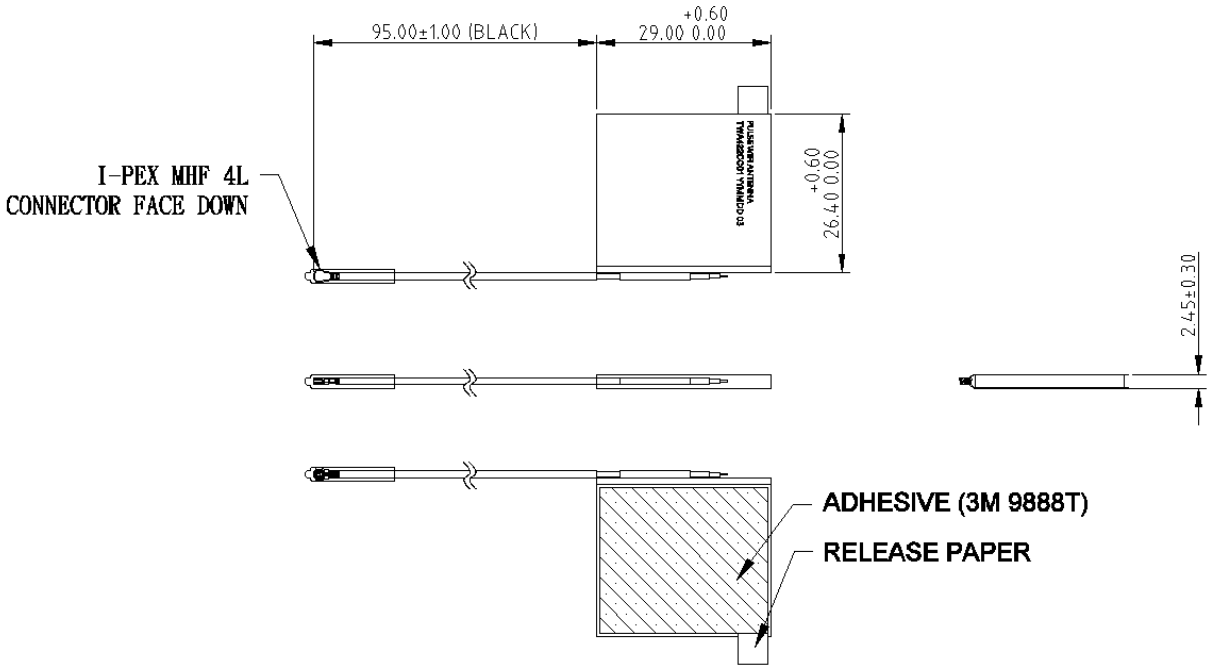
ENVIRONMENTAL SPECIFICATIONS			
TWA422CC01			
Storage Temperature	**Operating Temperature**	**Ingress Protection**	**RoHS Compliant**
-40/+85° C	-40/+85° C	N/A	Yes

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Mechanical Drawing

TWA422CC01



Units: mm

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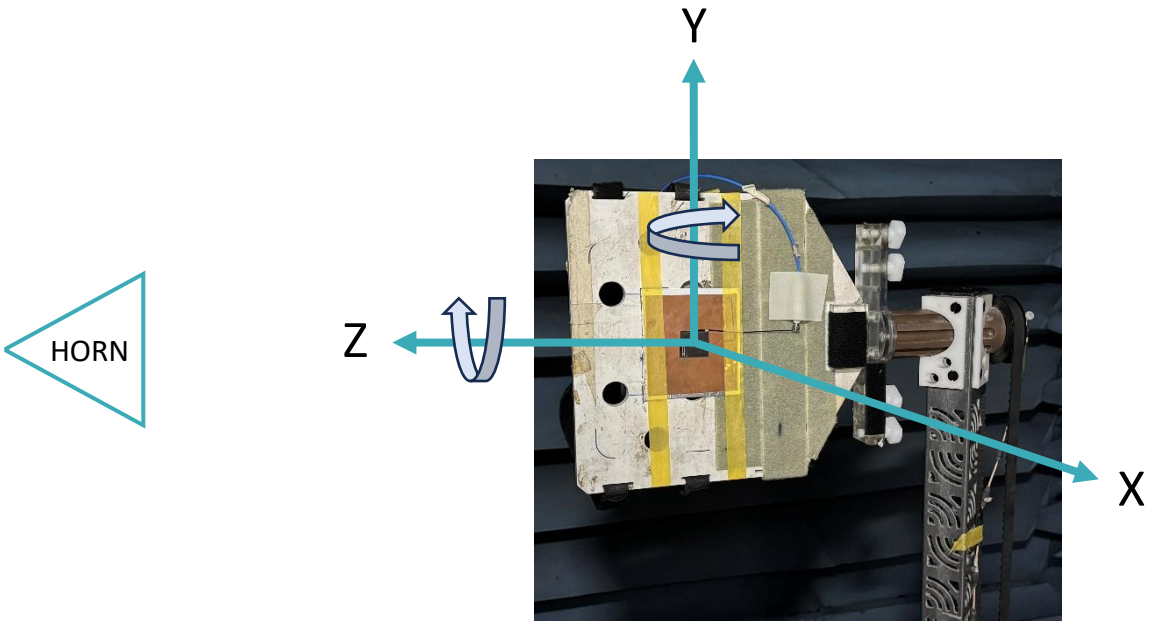
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Test Setup

General / Chamber Setup

- Measured at Pulse YP (ETS Lindgren Chamber)
- Test data measured with 95mm cable
- The antenna is mounted on a 100mm x 100mm x 1mm metal plate

Measurement setup

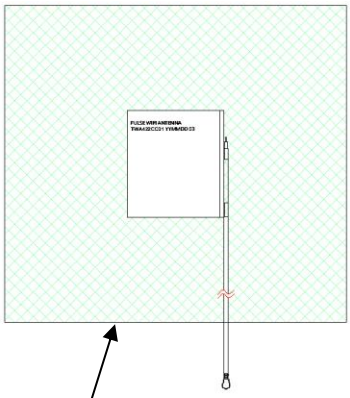


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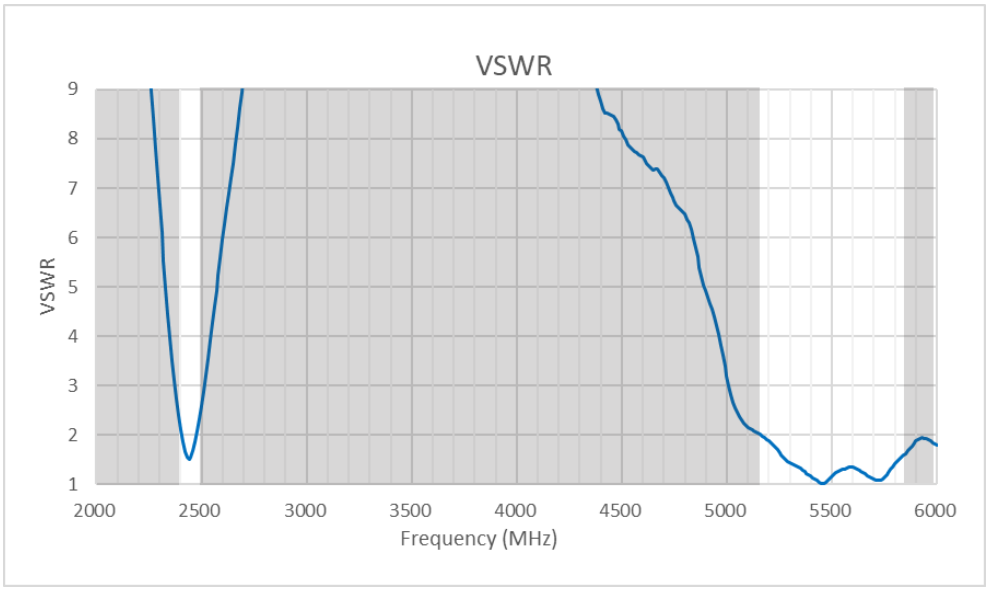
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Charts – VSWR

Test data



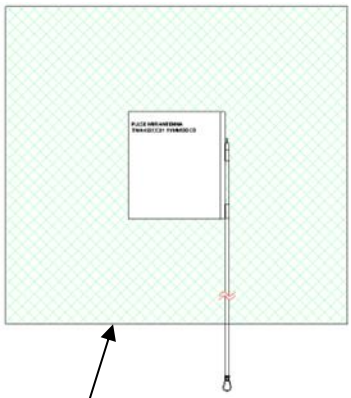
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



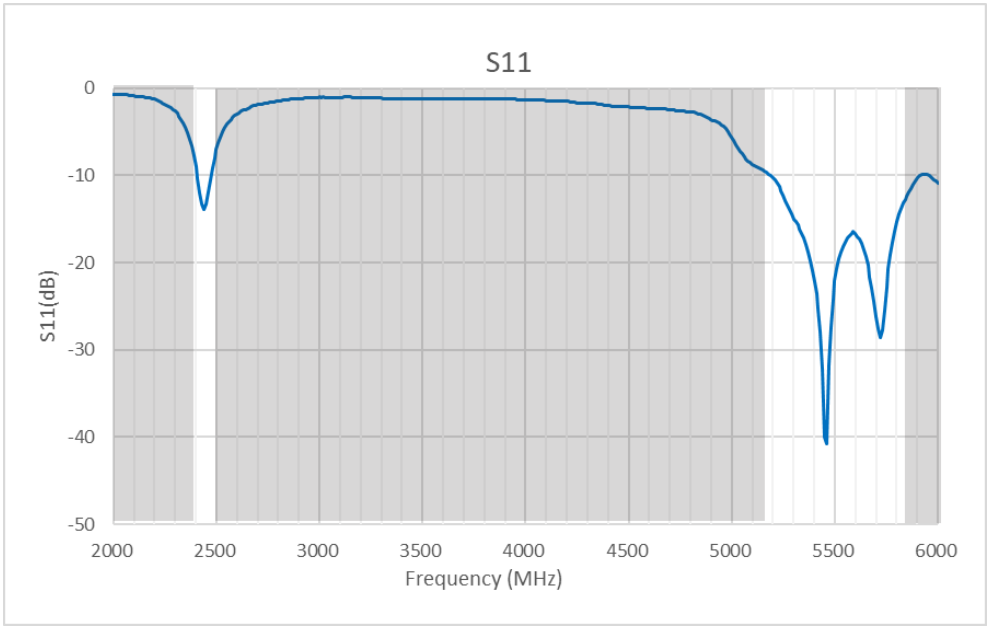
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts –Return Loss

Test data



Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



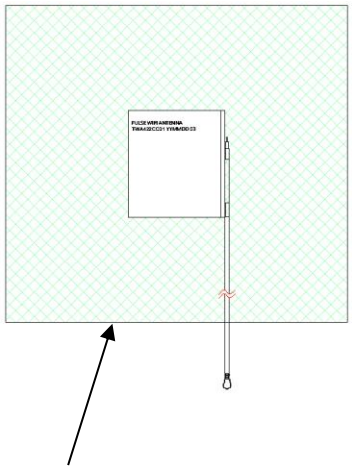
* Data measured with a 100mm x 100mm x 1mm metal plate

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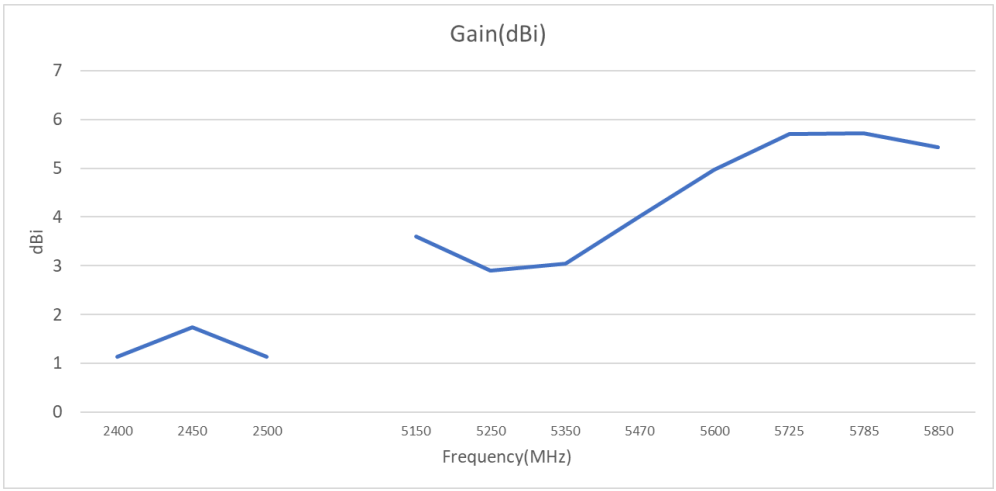
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Charts – Peak Gain(dBi)

Test data



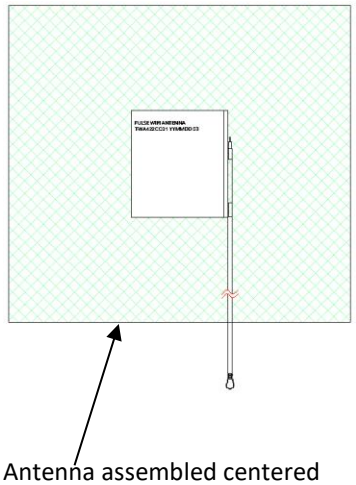
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



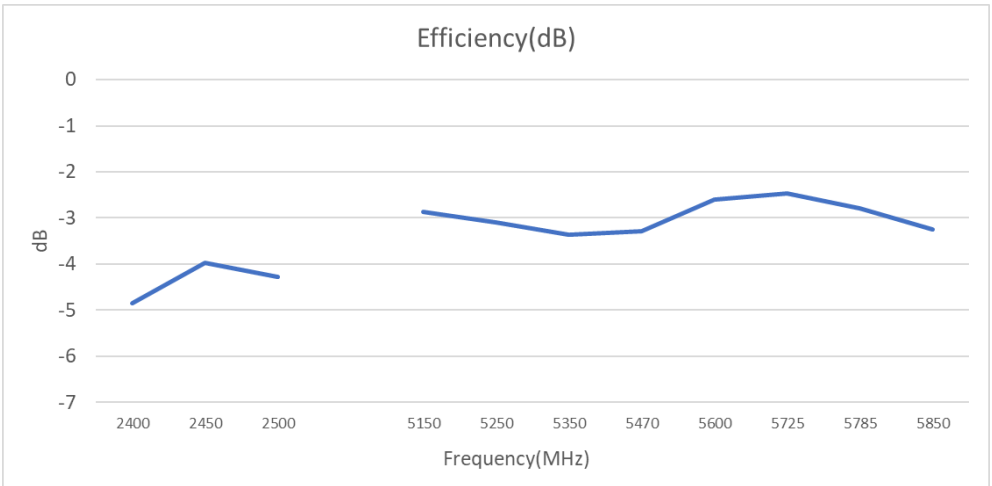
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts – Efficiency(dB)

Test data



Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



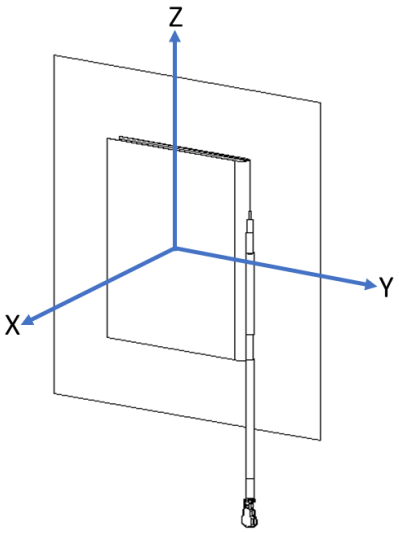
* Data measured with a 100mm x 100mm x 1mm metal plate

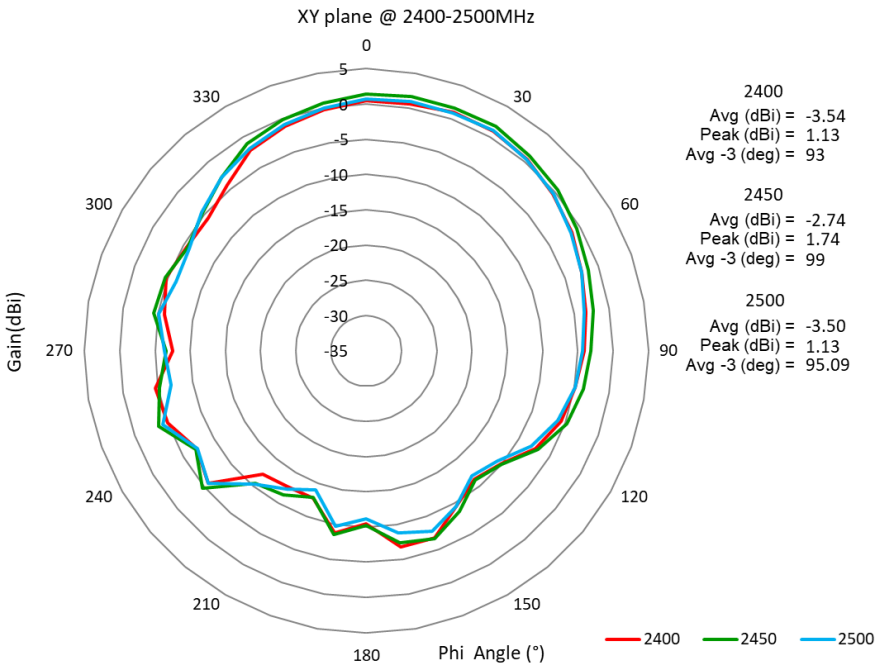
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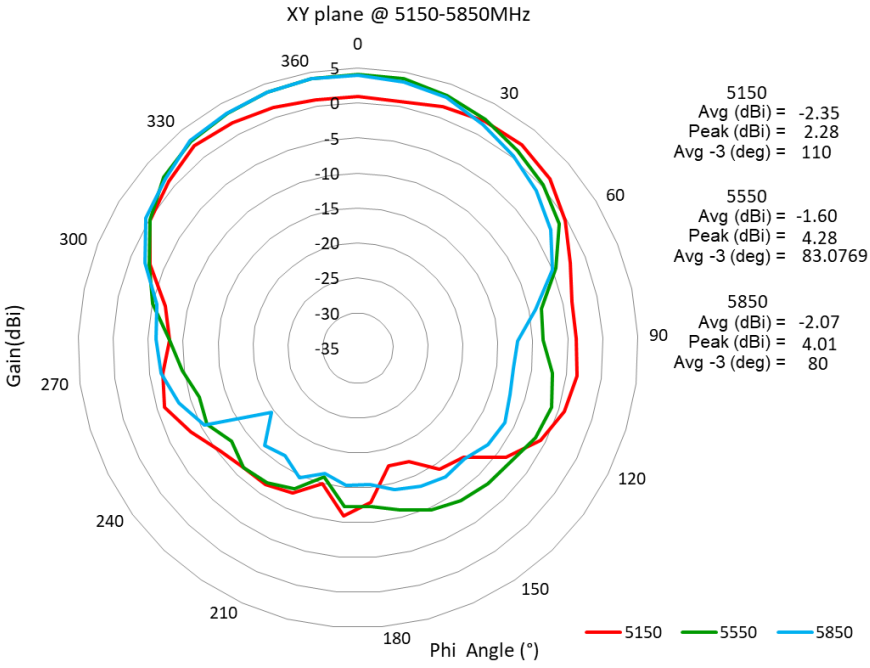
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Radiation Pattern – XY Gain Plots

Test data





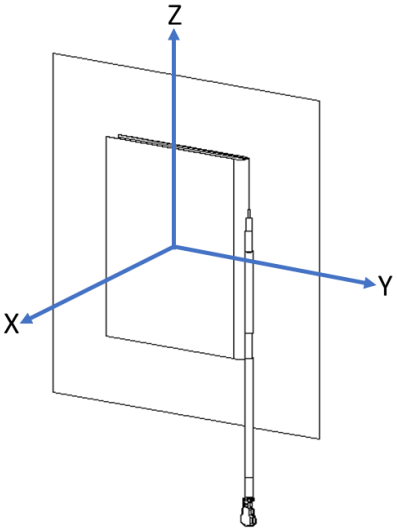


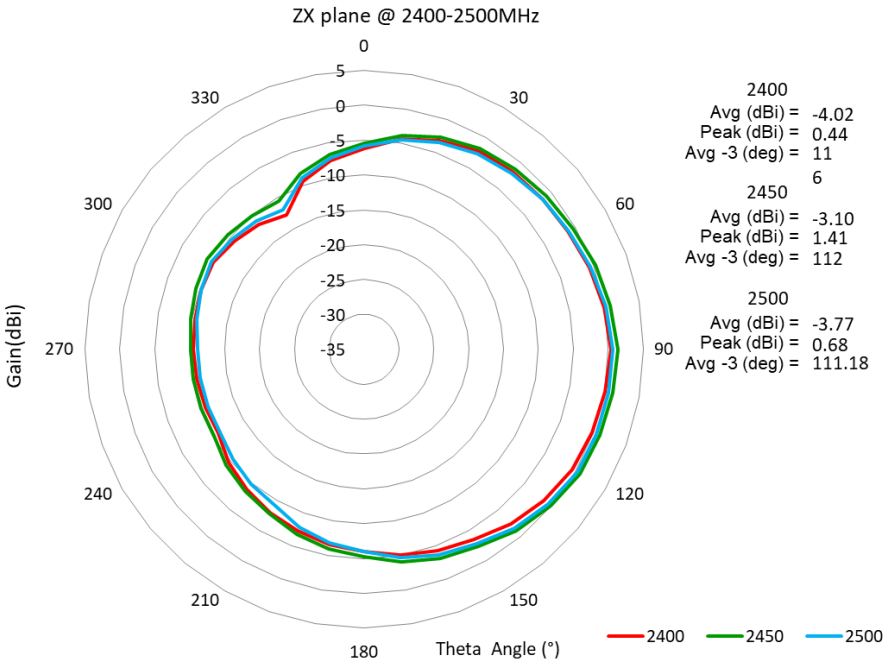
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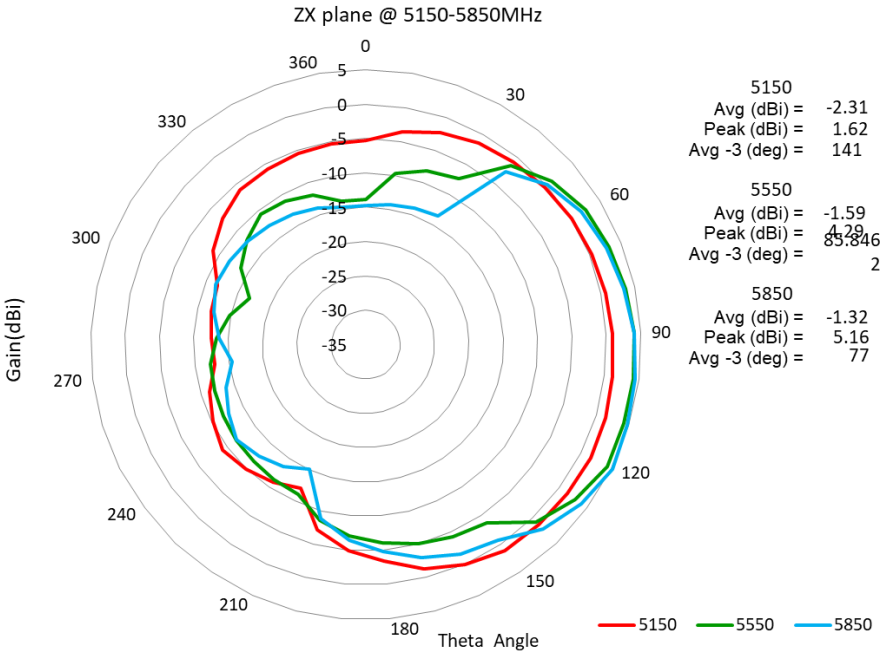
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Radiation Pattern – ZX Gain Plots

Test data





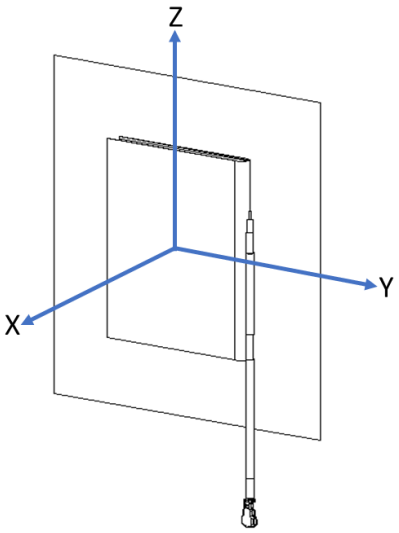


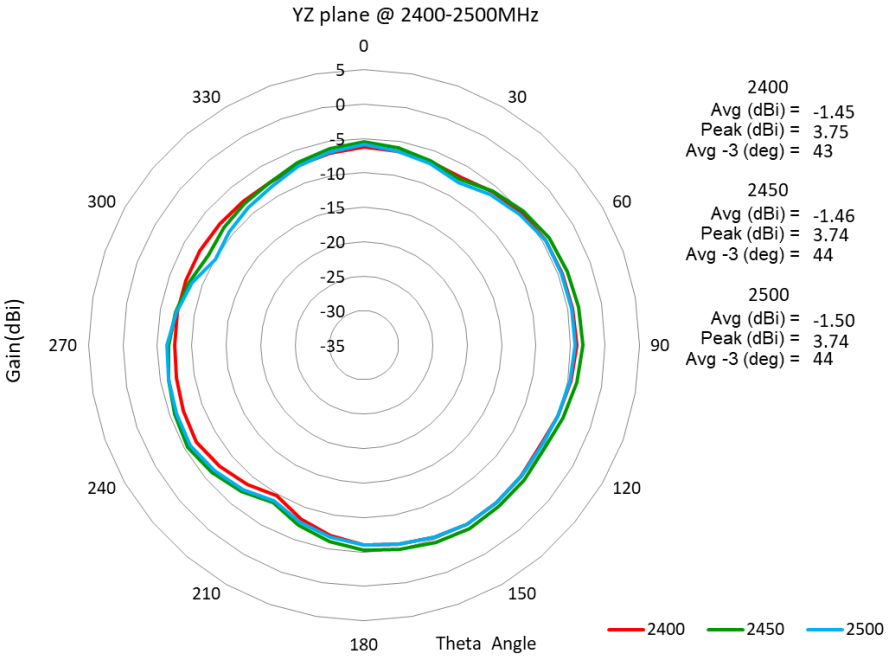
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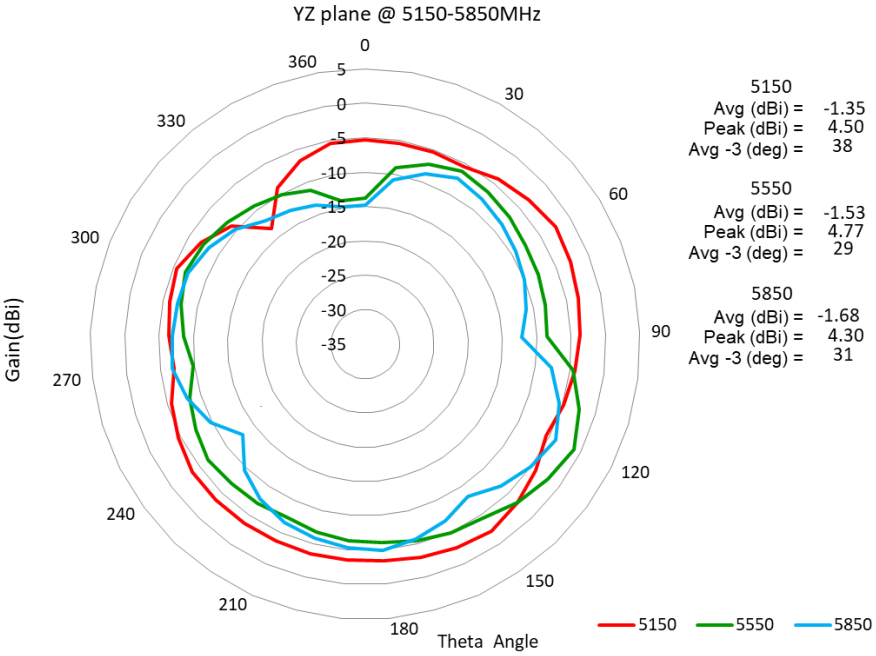
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Radiation Pattern – YZ Gain Plots

Test data







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PACKAGING

TWA422CC01

10 PCS/PE bag
10 PE bag/foam bag
50 foam bag/carton box
Total 5000 PCS/carton box
Package box: 460mm*235mm*140mm



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