

Metal Surface Mount WiFi Antenna

TWA422CC01 – 2.4 to 2.5 GHz/5.15 to 5.85GHz



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

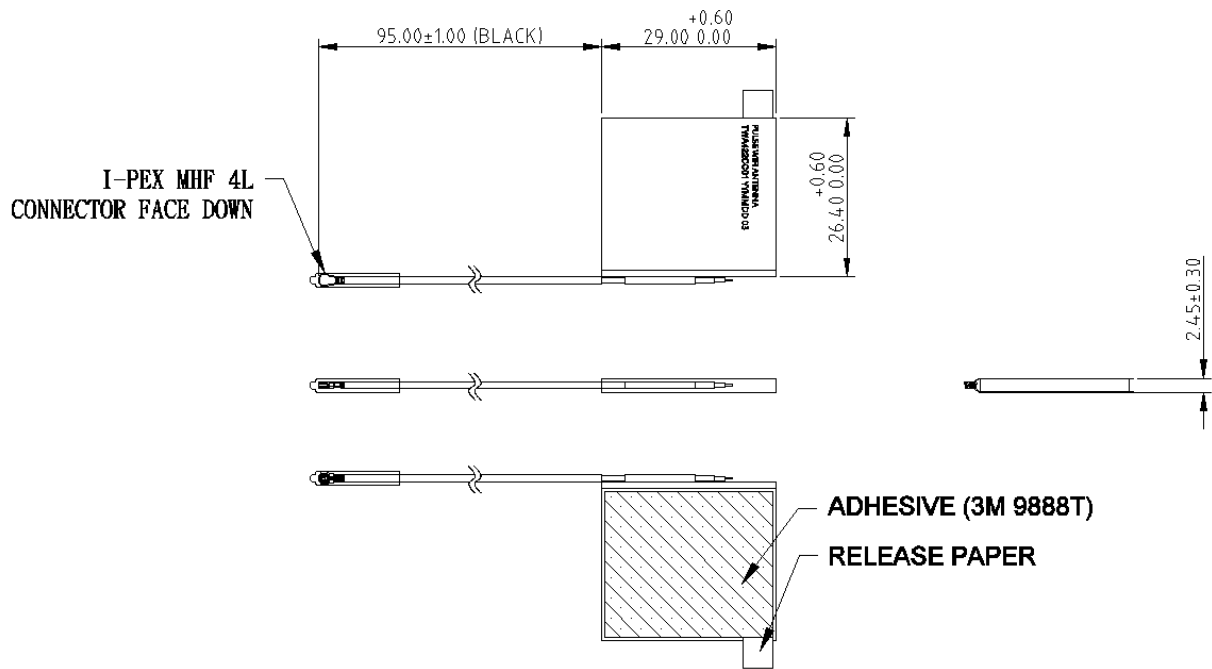
Storage Temperature	Operating Temperature	Ingress Protection	RoHS Compliant
-40/+85° C	-40/+85° C	N/A	Yes

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Mechanical Drawing

TWA422CC01



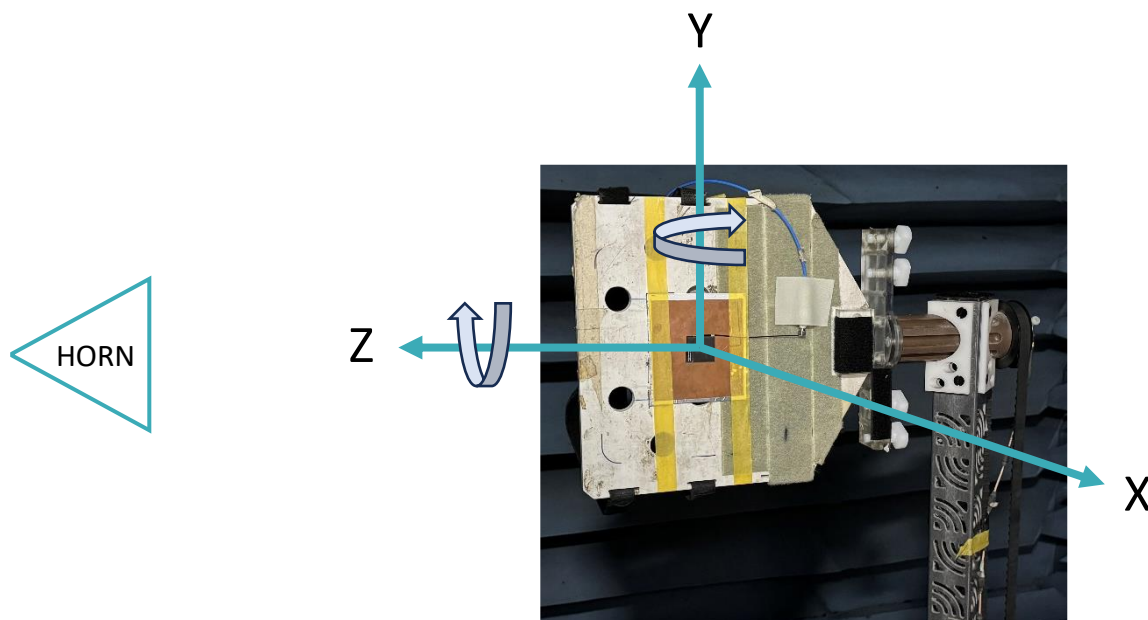
Units: mm

Test Setup

General / Chamber Setup

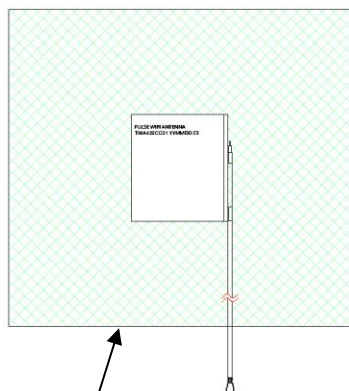
- Measured at Pulse YP (ETS Lindgren Chamber)
- Test data measured with 95mm cable
- The antenna is mounted on a 100mm x 100mm x 1mm metal plate

Measurement setup

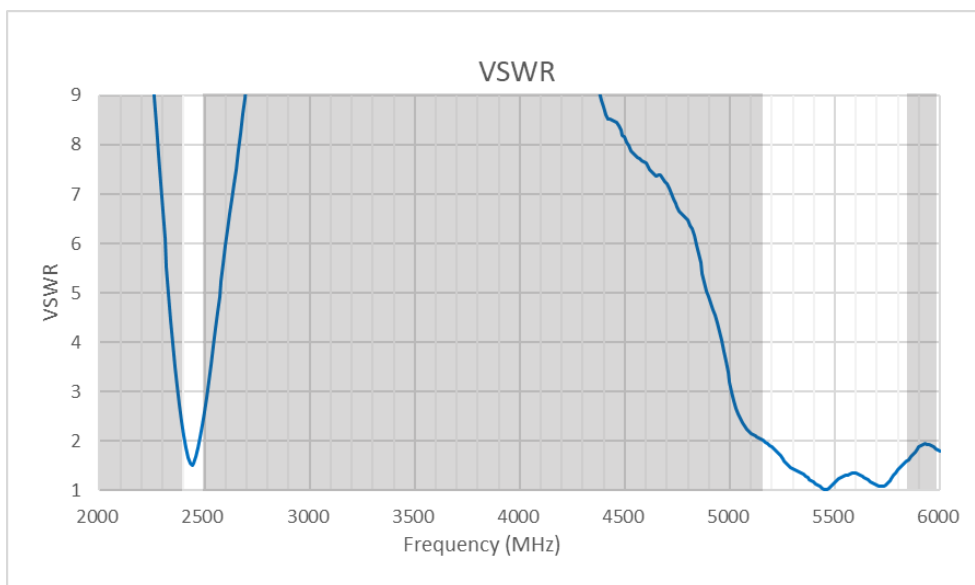


Charts – VSWR

Test data



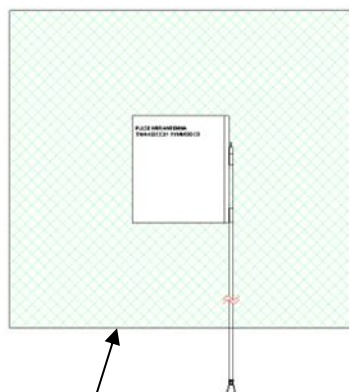
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



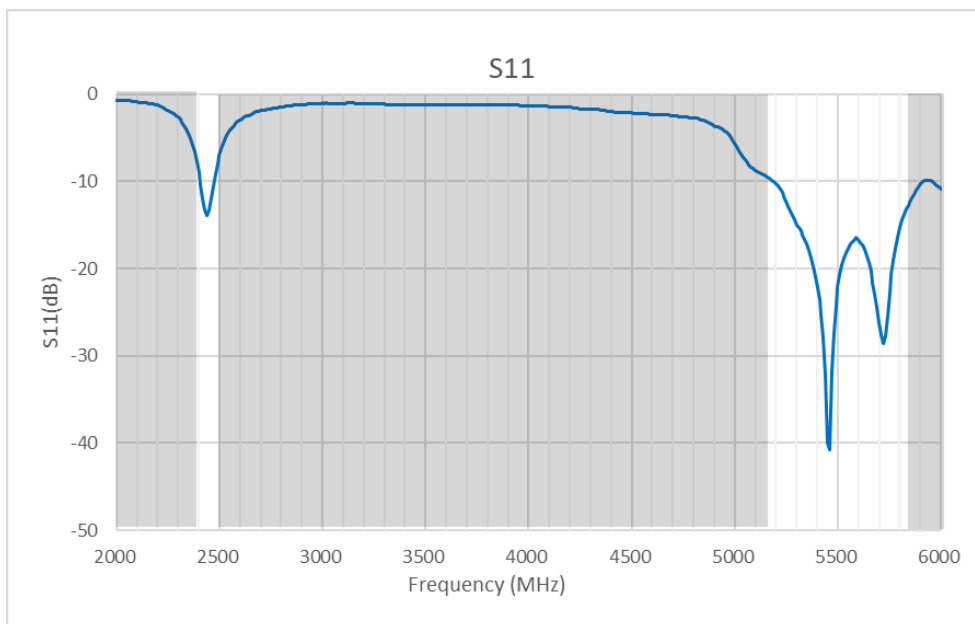
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts –Return Loss

Test data



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



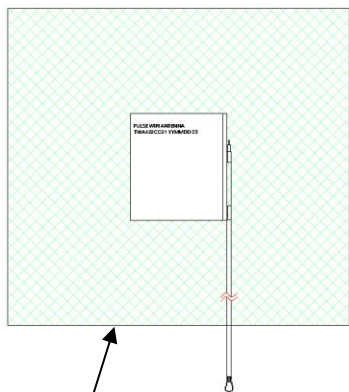
* Data measured with a 100mm x 100mm x 1mm metal plate

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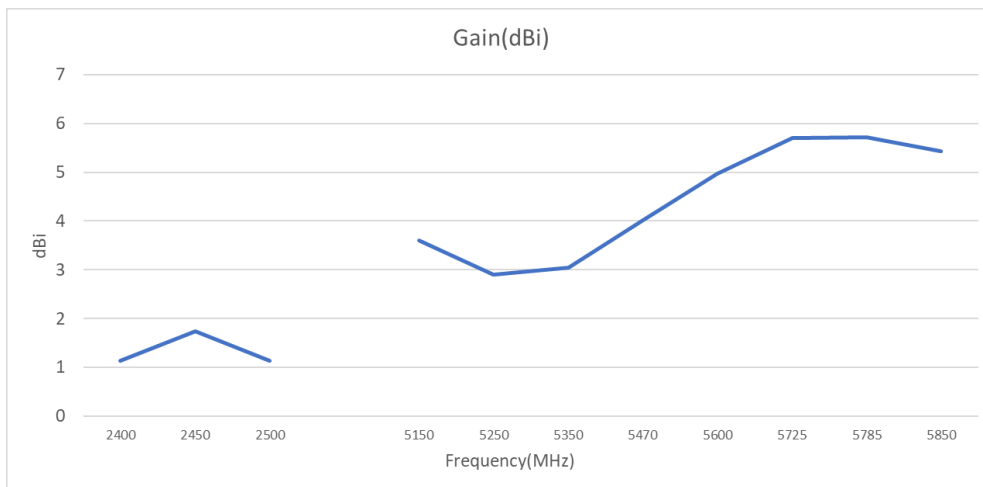
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Charts – Peak Gain(dBi)

Test data



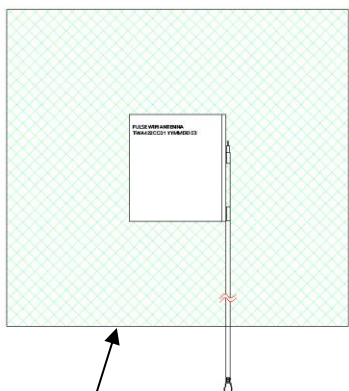
Antenna assembled centered
on a 100 mm x 100 mm x 1 mm
metal plate



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

Charts – Efficiency(dB)

Test data



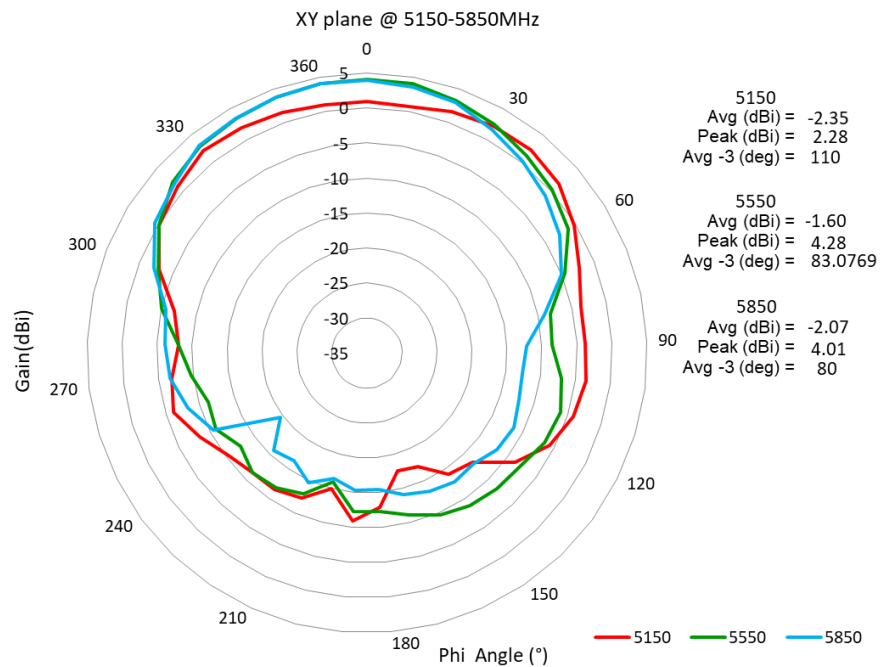
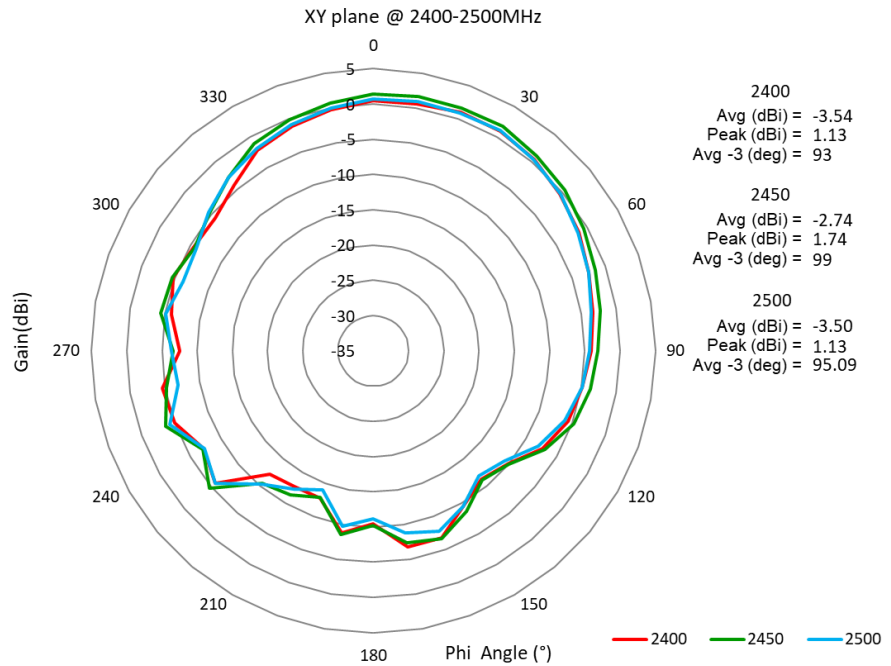
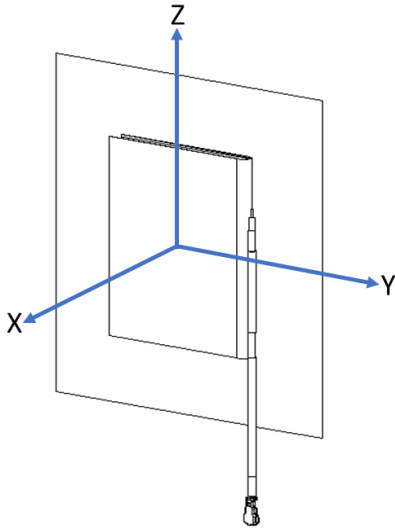
Antenna assembled centered
on a 100 mm x 100 mm x 1 mm
metal plate



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

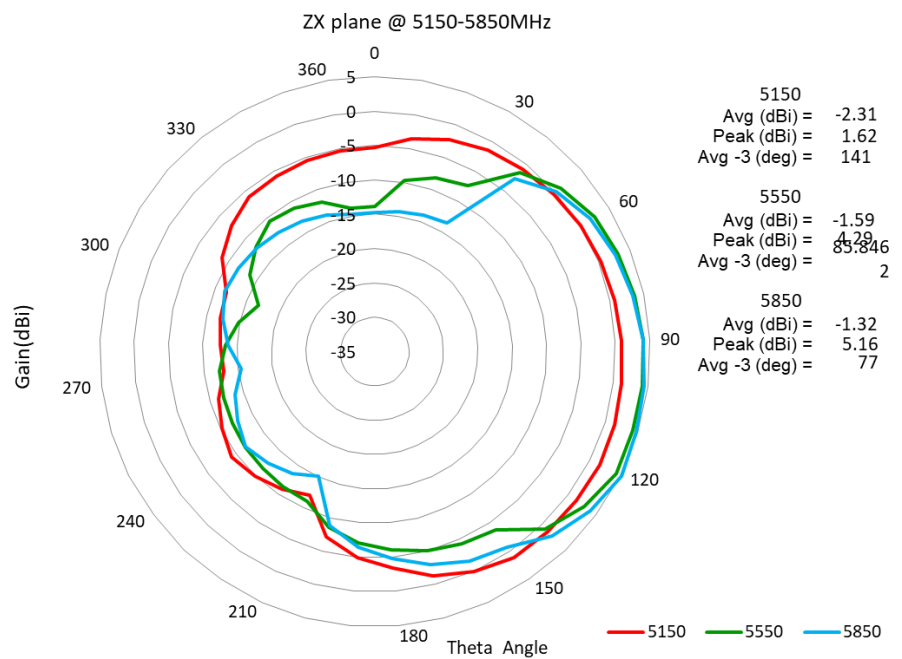
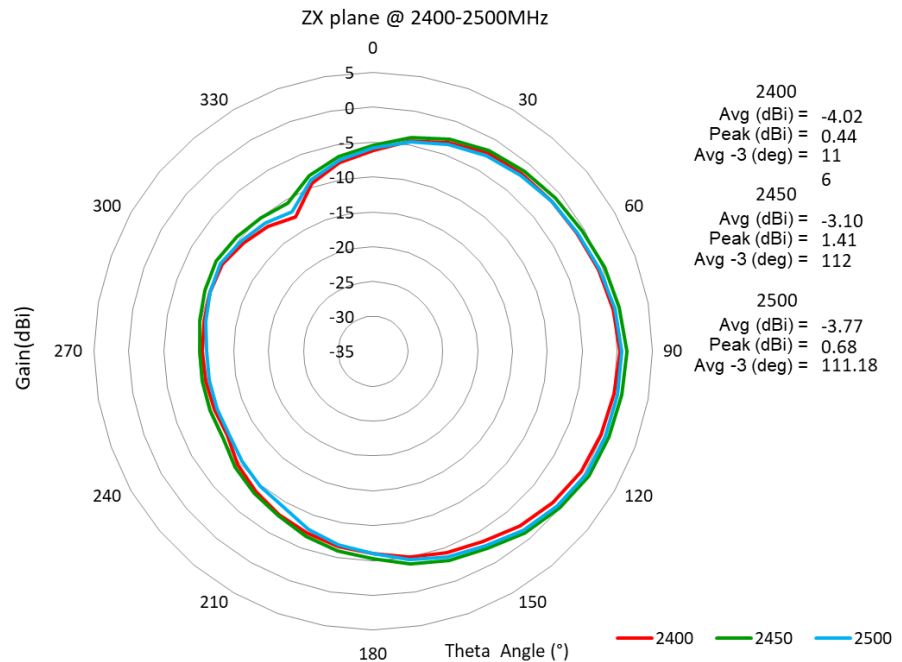
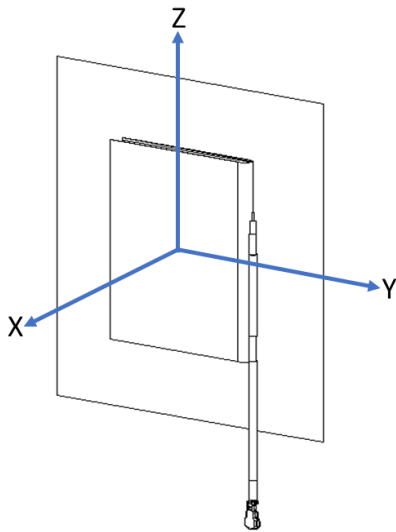
Radiation Pattern – XY Gain Plots

Test data



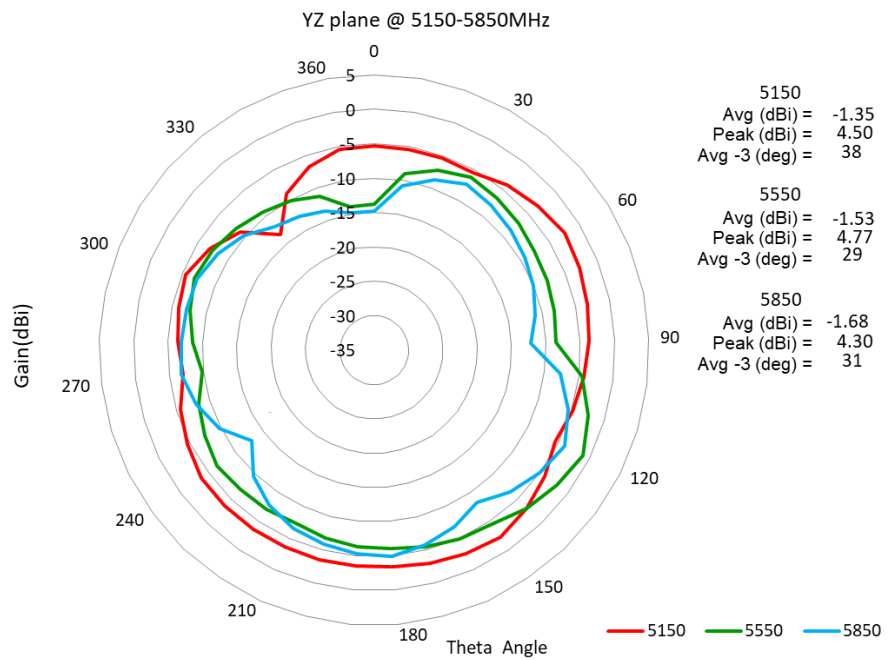
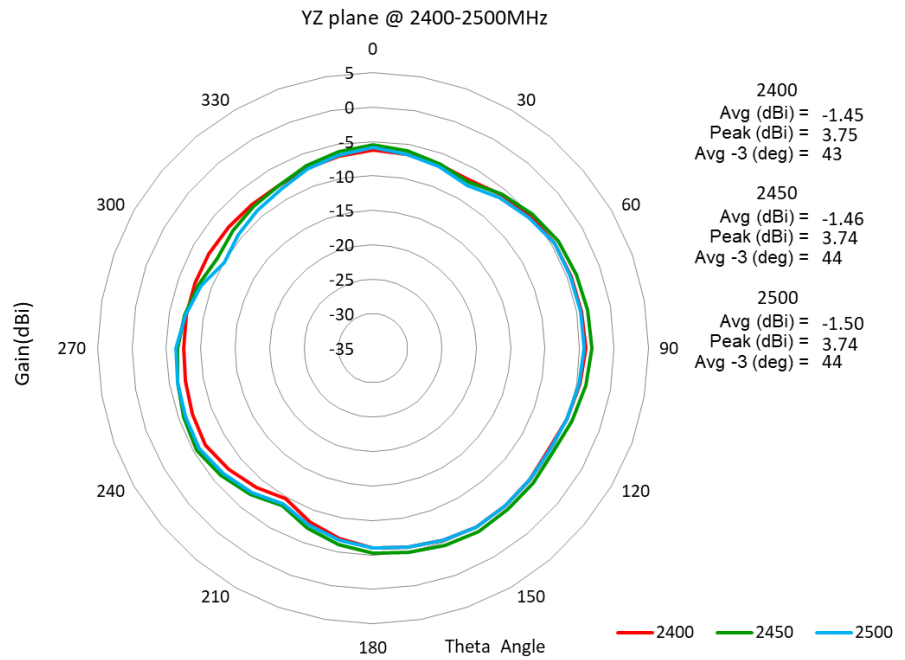
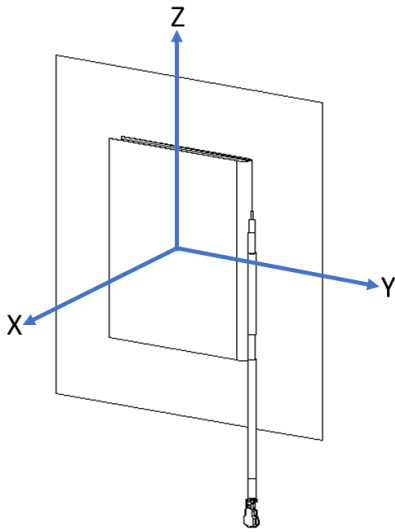
Radiation Pattern – ZX Gain Plots

Test data



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



For More Information:

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