

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

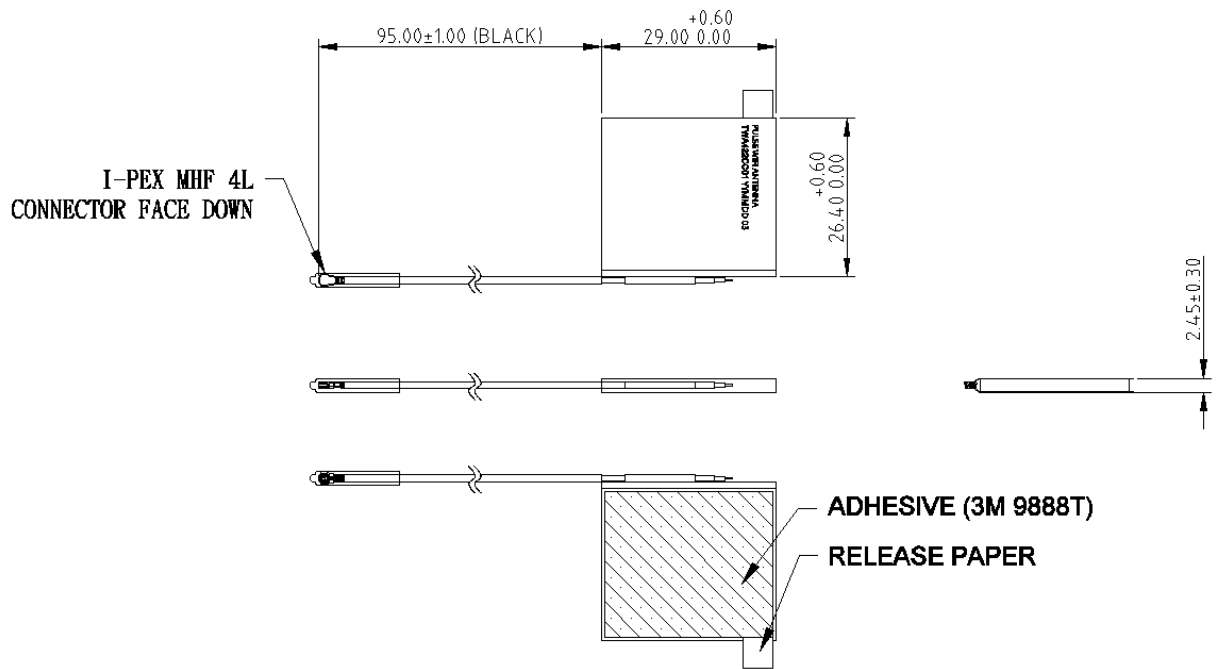
ENVIRONMENTAL SPECIFICATIONS

TWA422CC01

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

Mechanical Drawing

TWA422CC01



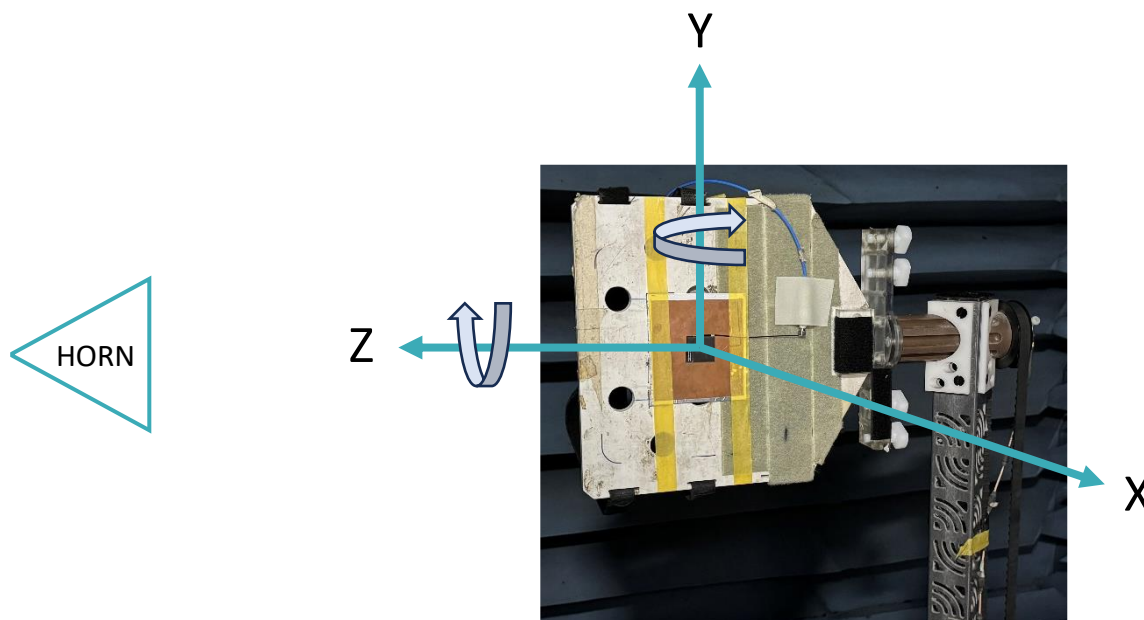
Units: mm

Test Setup

General / Chamber Setup

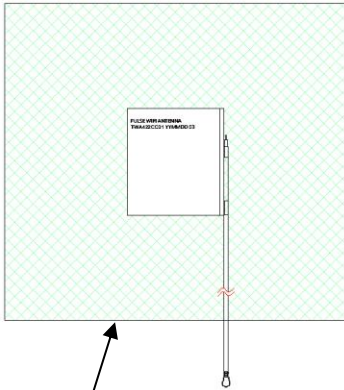
- Measured at Pulse YP (ETS Lindgren Chamber)
- Test data measured with 95mm cable
- The antenna is mounted on a 100mm x 100mm x 1mm metal plate

Measurement setup

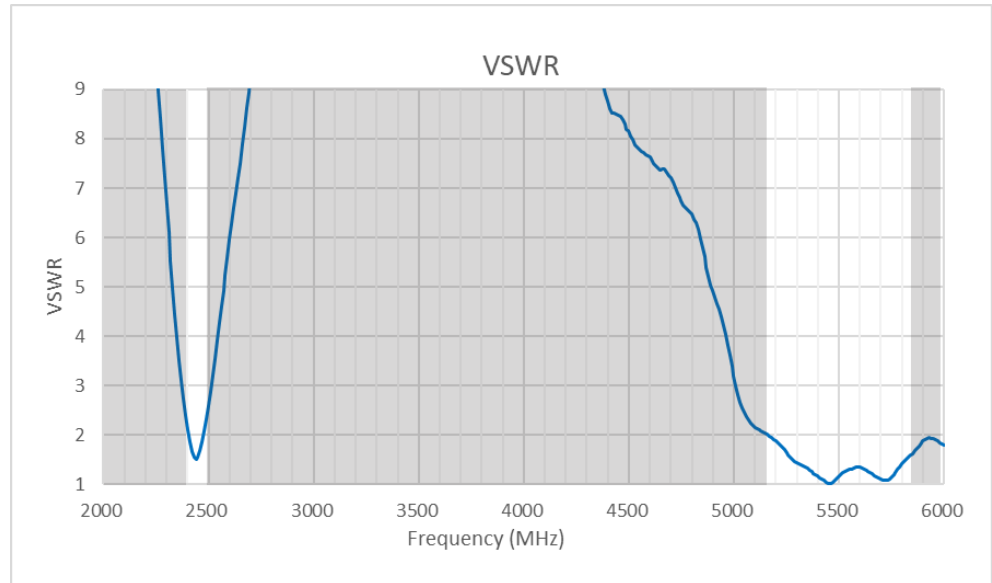


Charts – VSWR

Test data



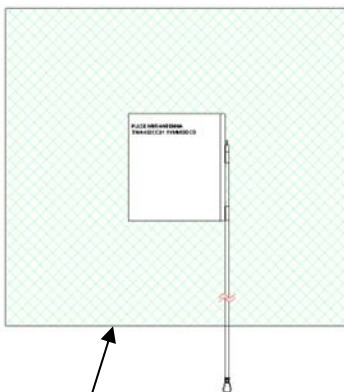
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



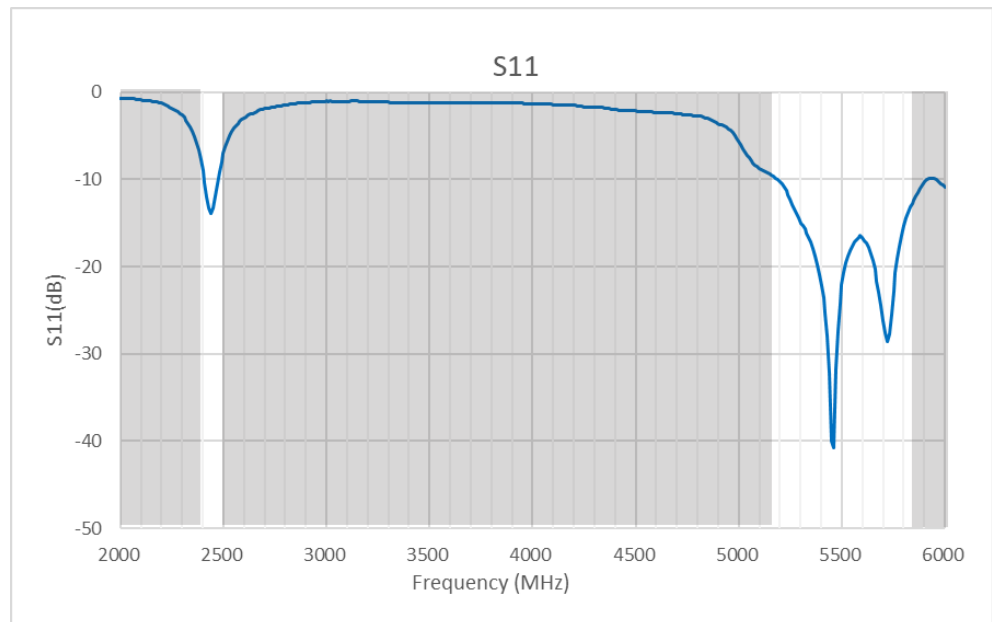
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts –Return Loss

Test data



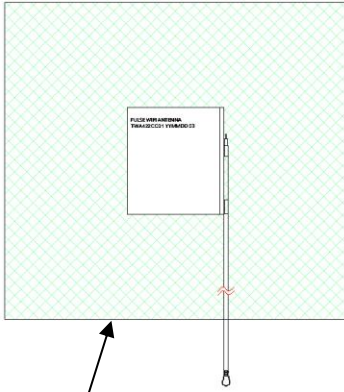
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



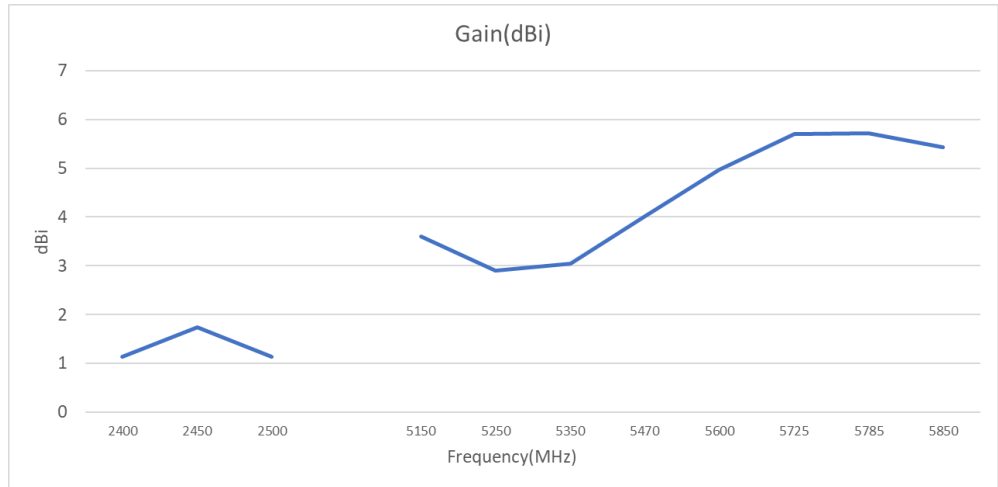
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts – Peak Gain(dBi)

Test data



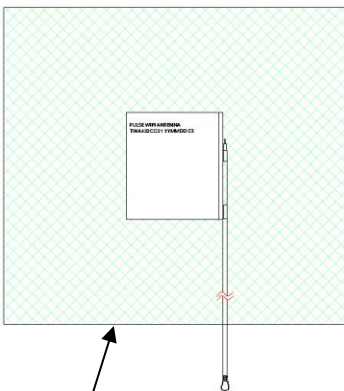
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



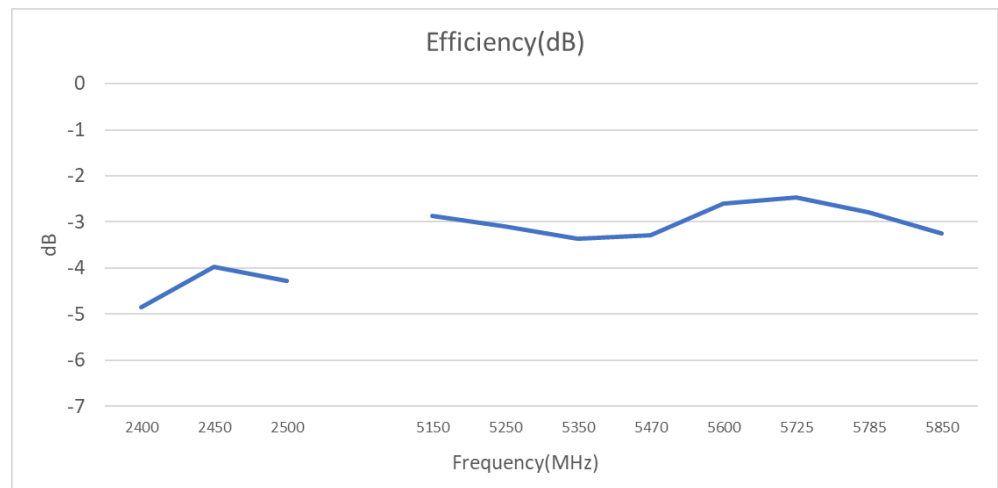
* Data measured with a 100mm x 100mm x 1mm metal plate

Charts – Efficiency(dB)

Test data



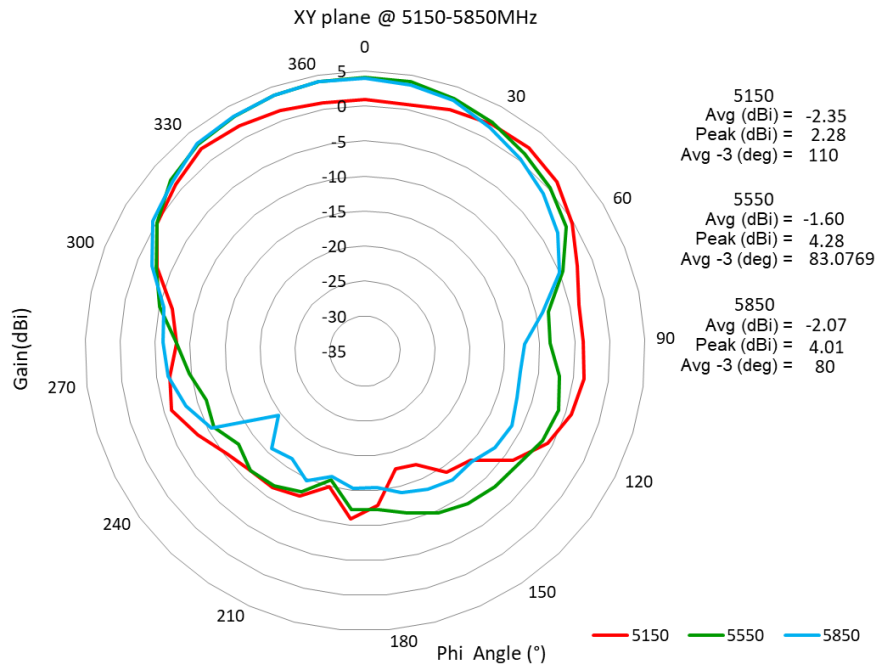
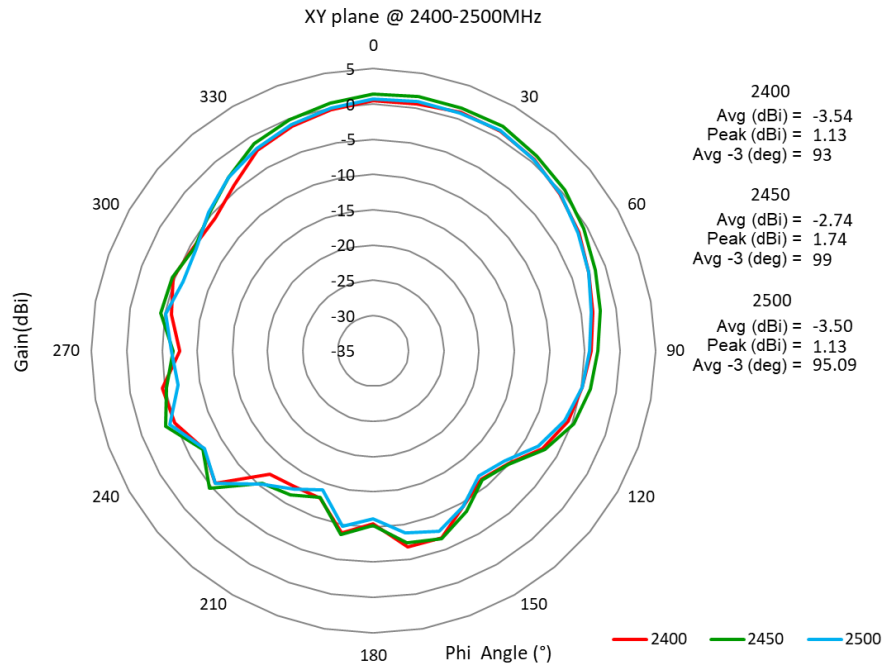
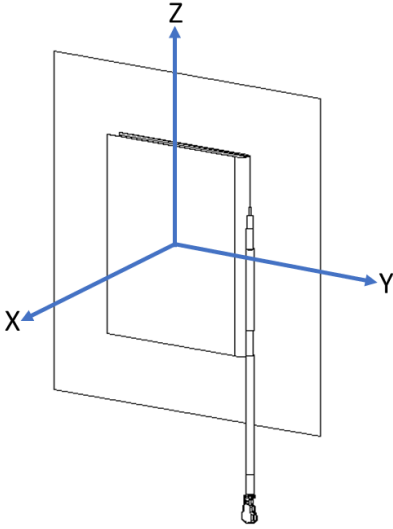
Antenna assembled centered on a 100 mm x 100 mm x 1 mm metal plate



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

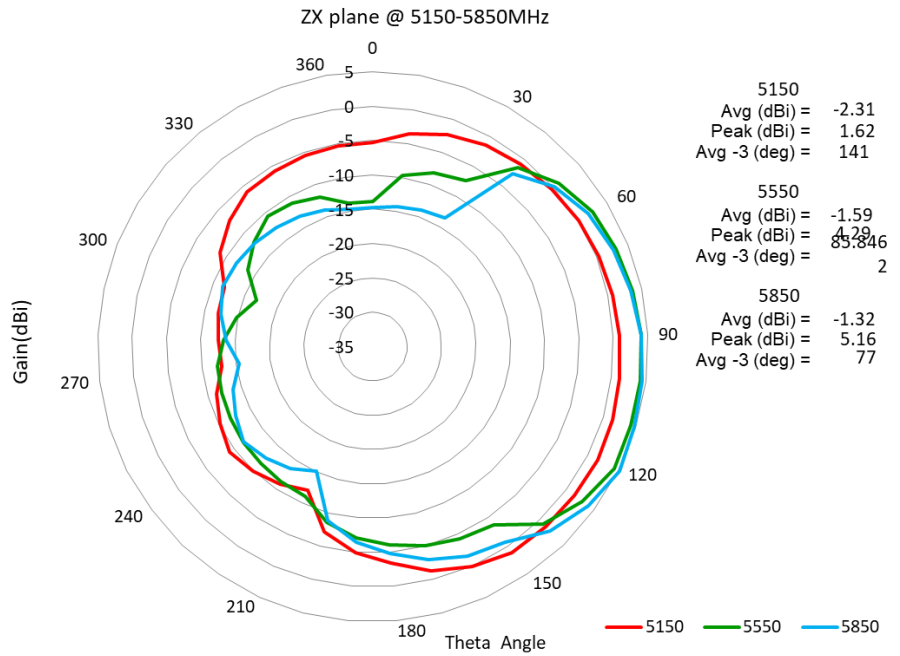
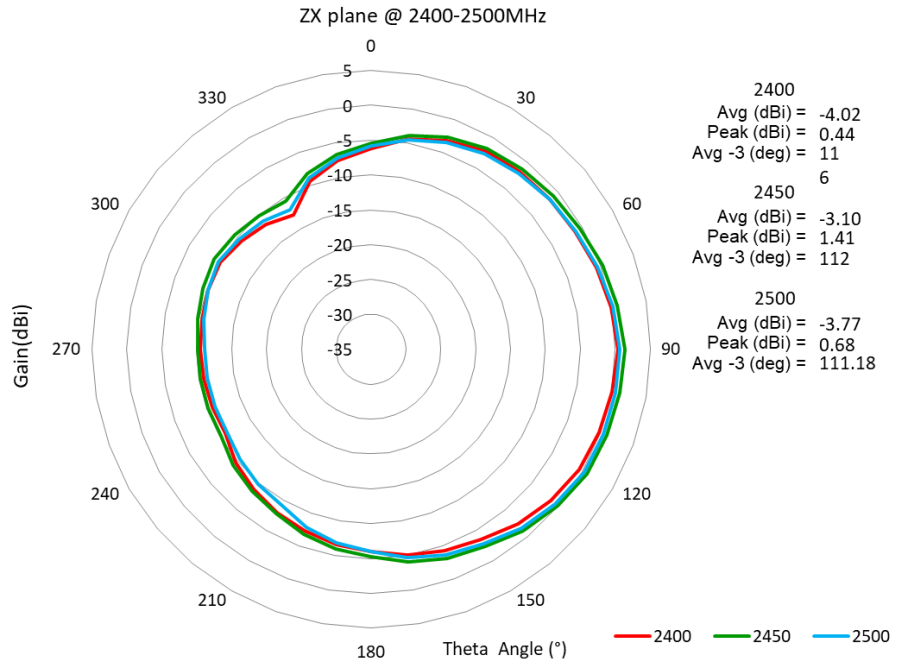
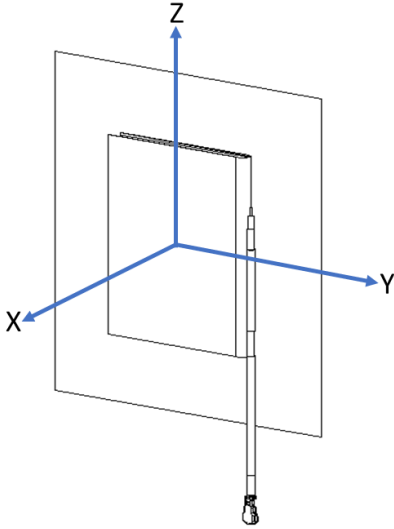
Radiation Pattern – XY Gain Plots

Test data



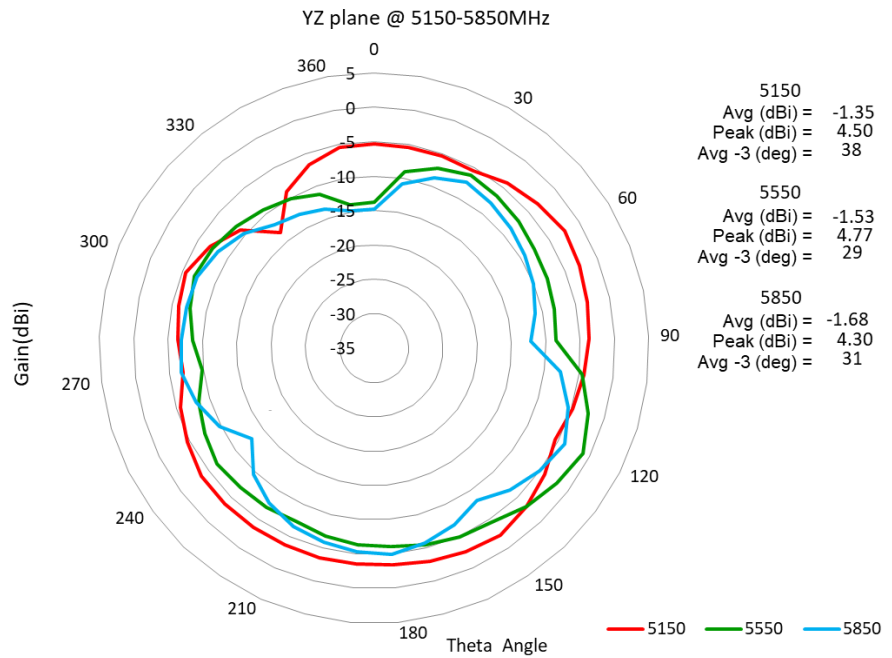
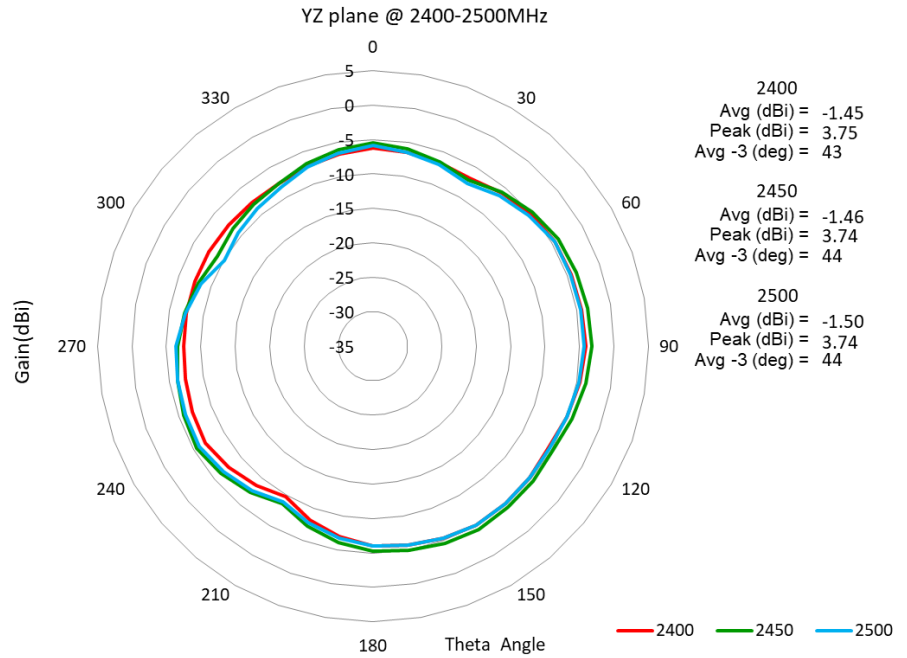
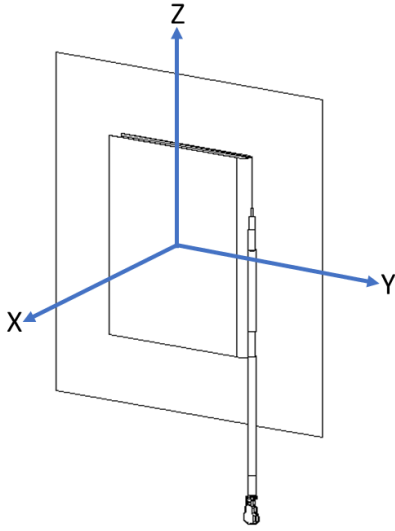
Radiation Pattern – ZX Gain Plots

Test data



Radiation Pattern – YZ Gain Plots

Test data



Metal Surface Mount WiFi Antenna

TWA422CC01 – 2.4 to 2.5 GHz/5.15 to 5.85GHz

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:

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

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright , 2020. Pulse Electronics, Inc. All rights reserved.

Company address: Pulse Electronics, a YAGEO Company, 15255 Innovation Drive, Suite #100, San Diego, CA 92128

'YAGEO Corporation and its affiliates do not recommend the use of commercial, automotive, and/or COTS grade products for high reliability applications or manned space flight.'