



Antenna proposal

Innolux

X-ray antenna evaluation report

Ken Kao

FAE Engineer Taoglas Taiwan

Peter Knaz

Senior Technical Sales Manager APAC

Confidential

April 16, 2018



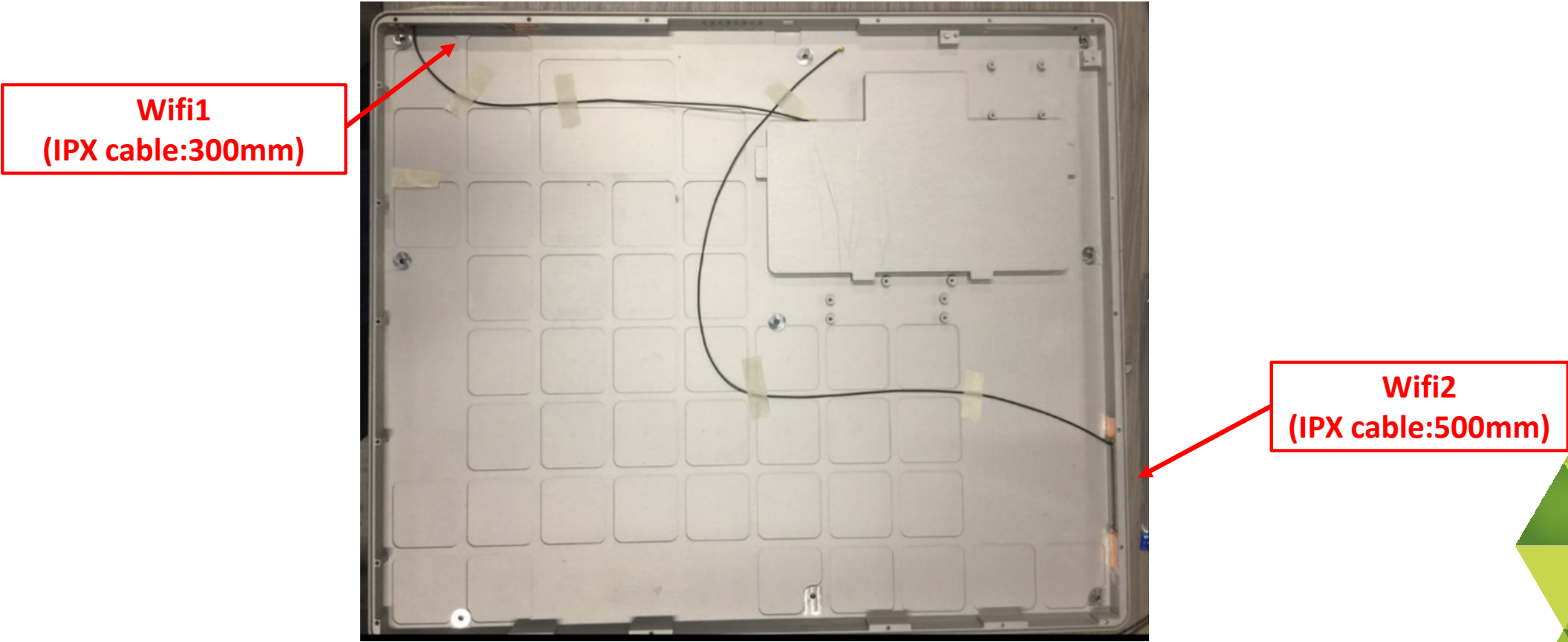
Outline

- **Antenna Environmental**
- **Antenna fixed method**
 - Wifi1 : Slot antenna lock screw in the housing
 - Wifi2 : Slot antenna lock screw in the housing
- **S11**
- **Efficiency**
 - a) Efficiency
 - b) Average Gain
 - c) Peak Gain
 - d) Performance table
- **Chamber Environmental**
- **Antenna 2D radiation patterns**



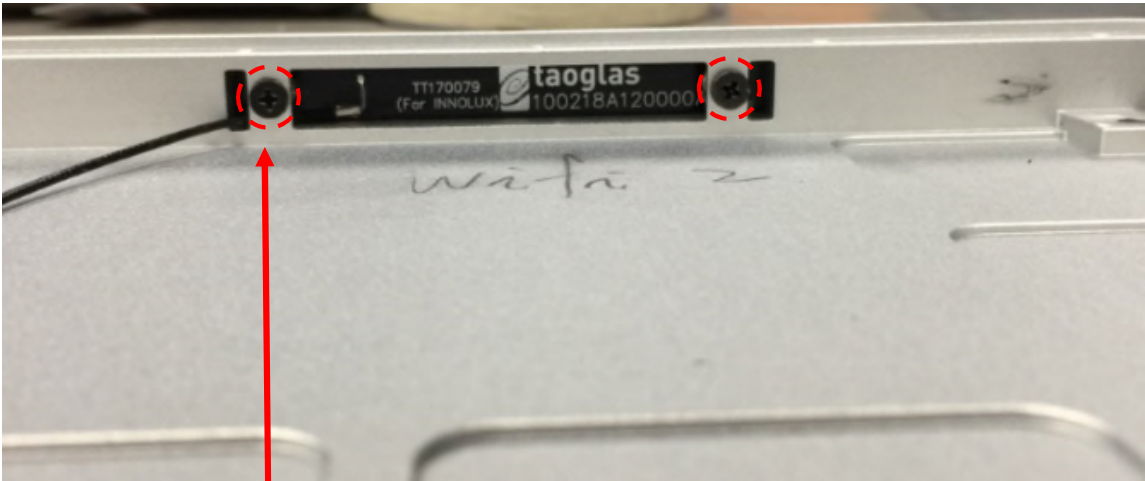
Antenna Environmental

Wifi1 & Wifi2 position

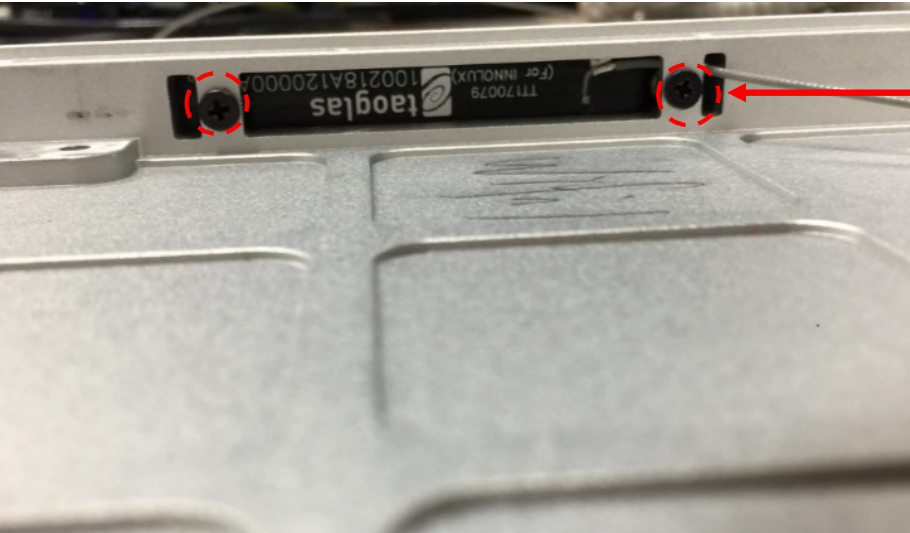


Antenna fixed method

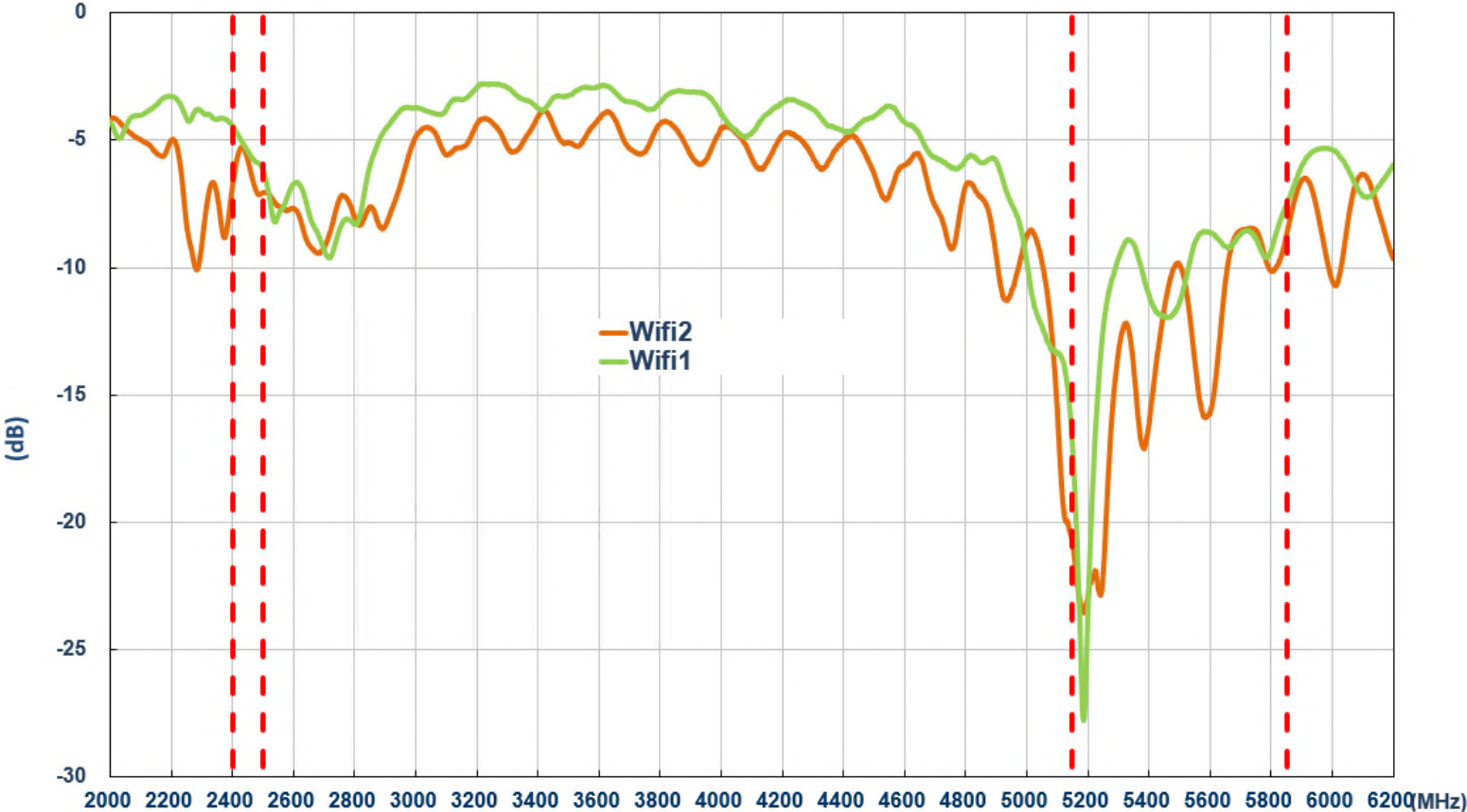
Wifi1 & Wifi2 antenna solder nut and screw in housing.



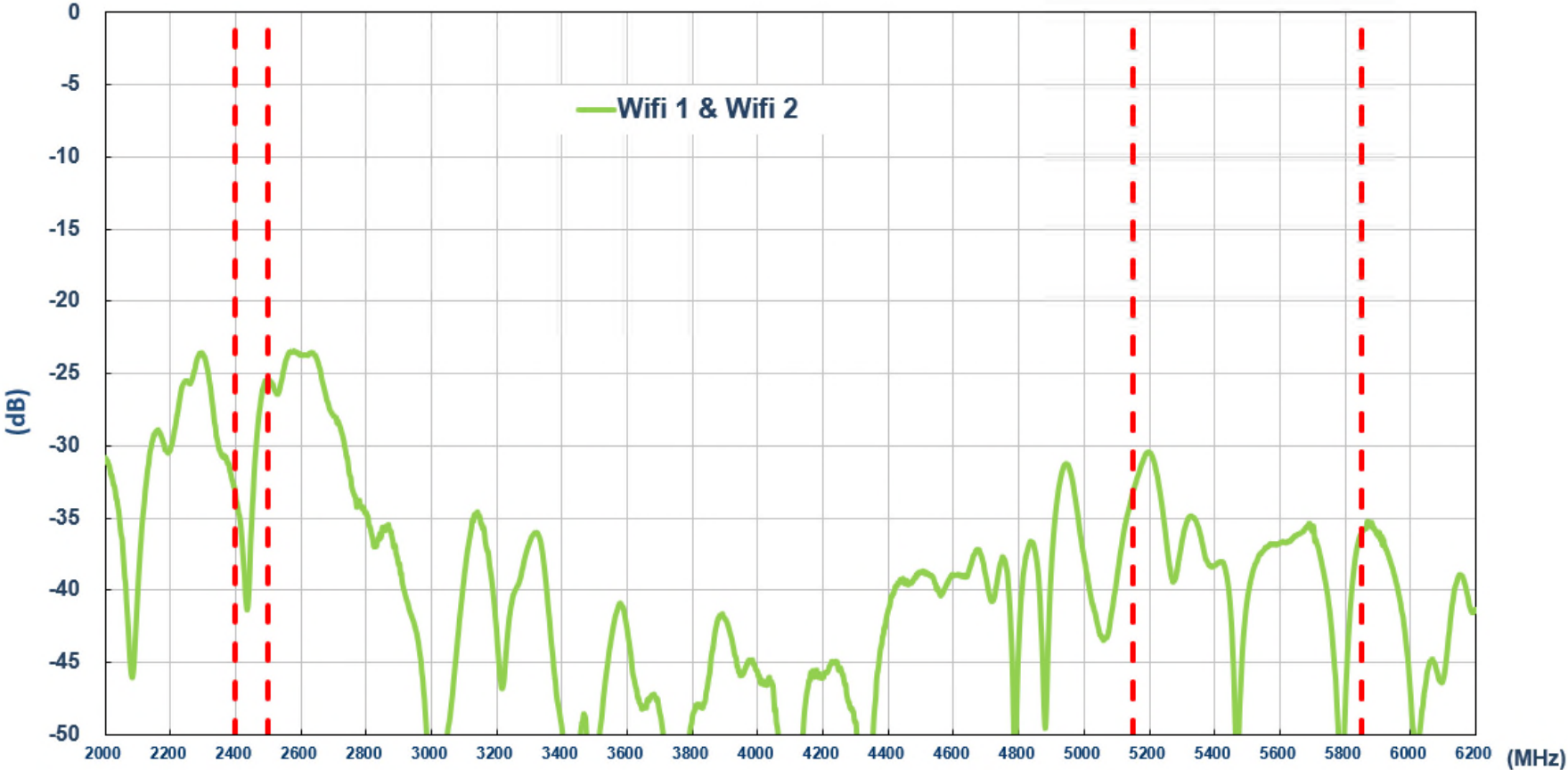
Nut for M2.5 screw



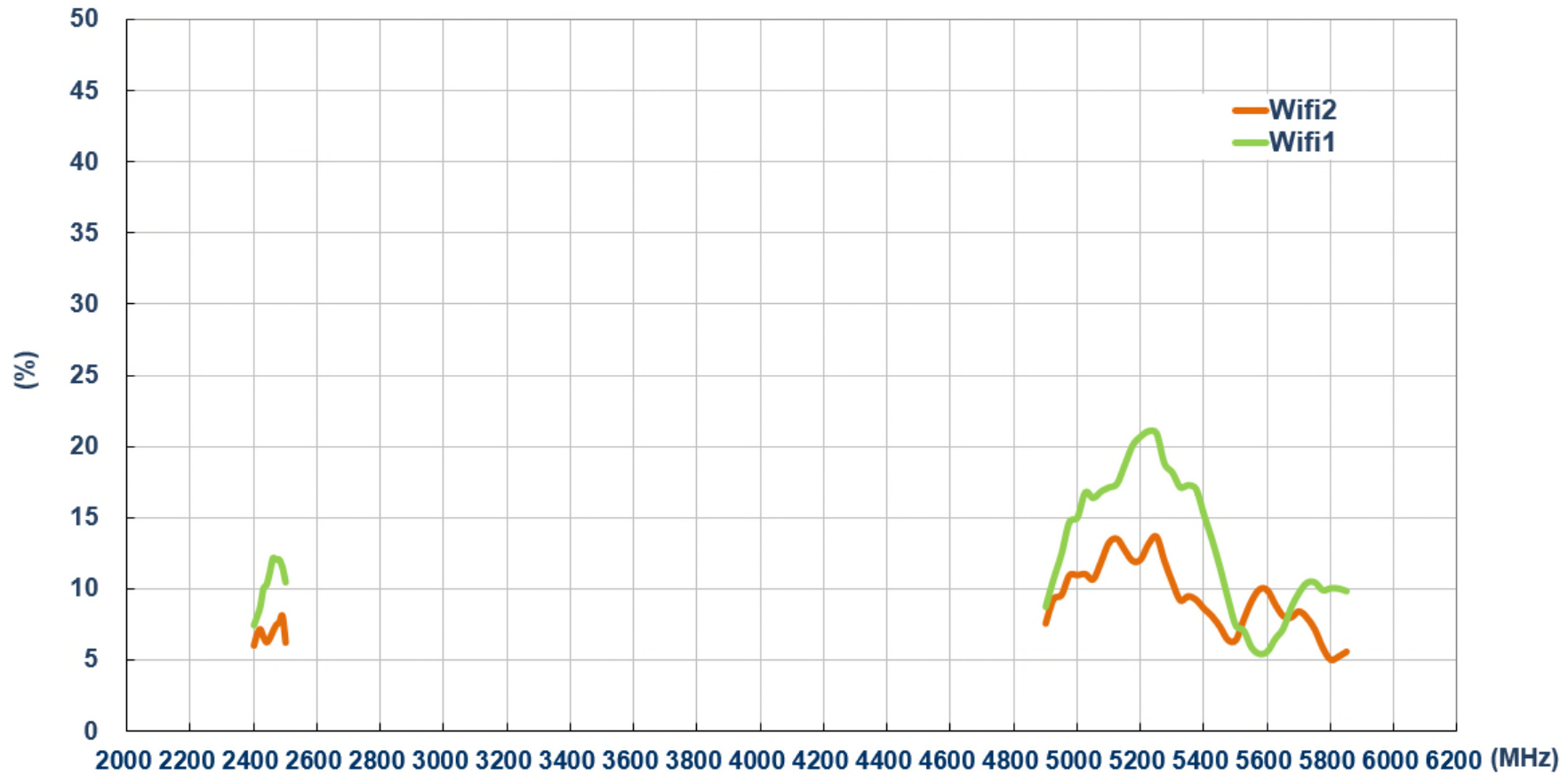
S11



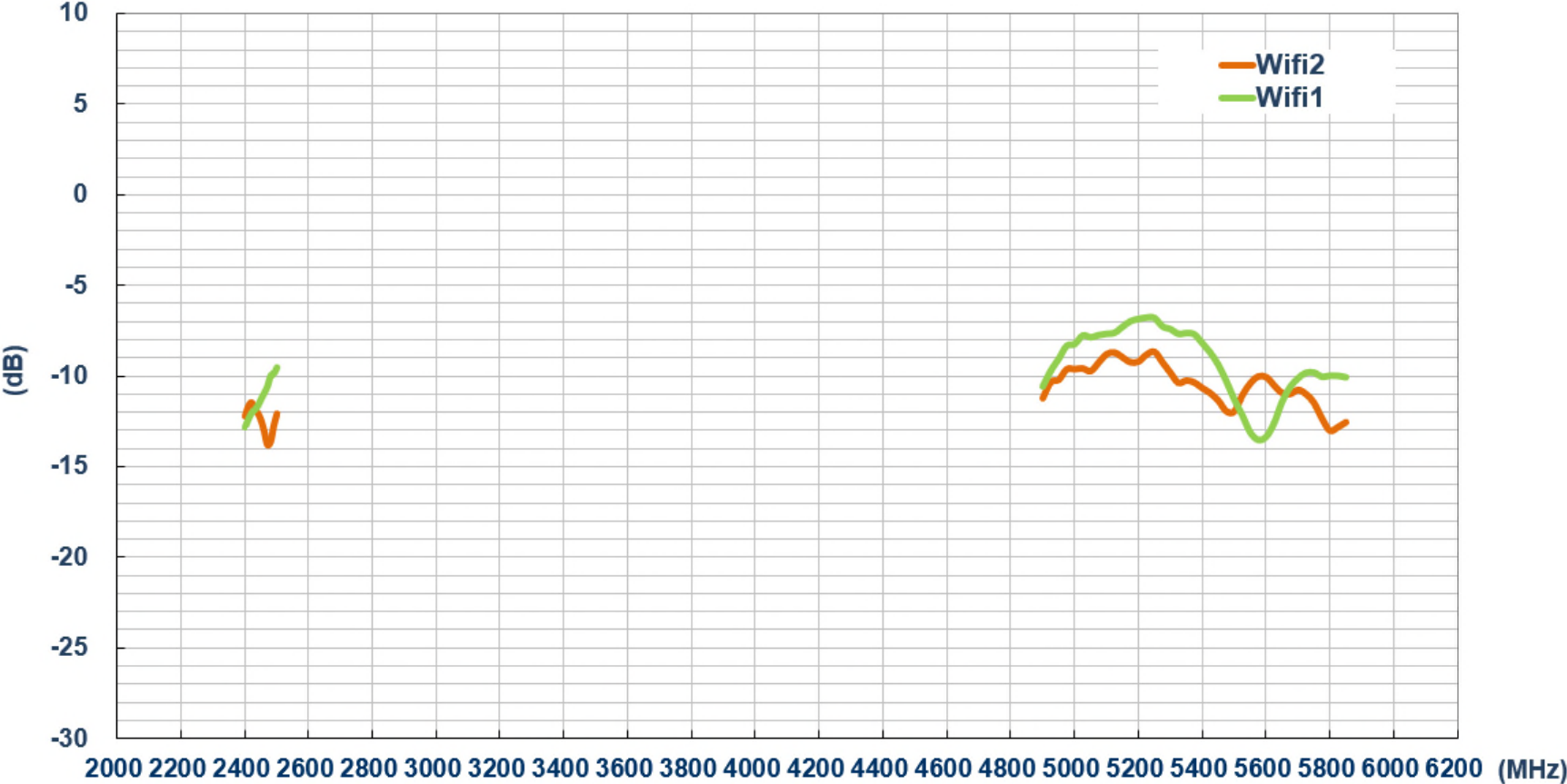
S21



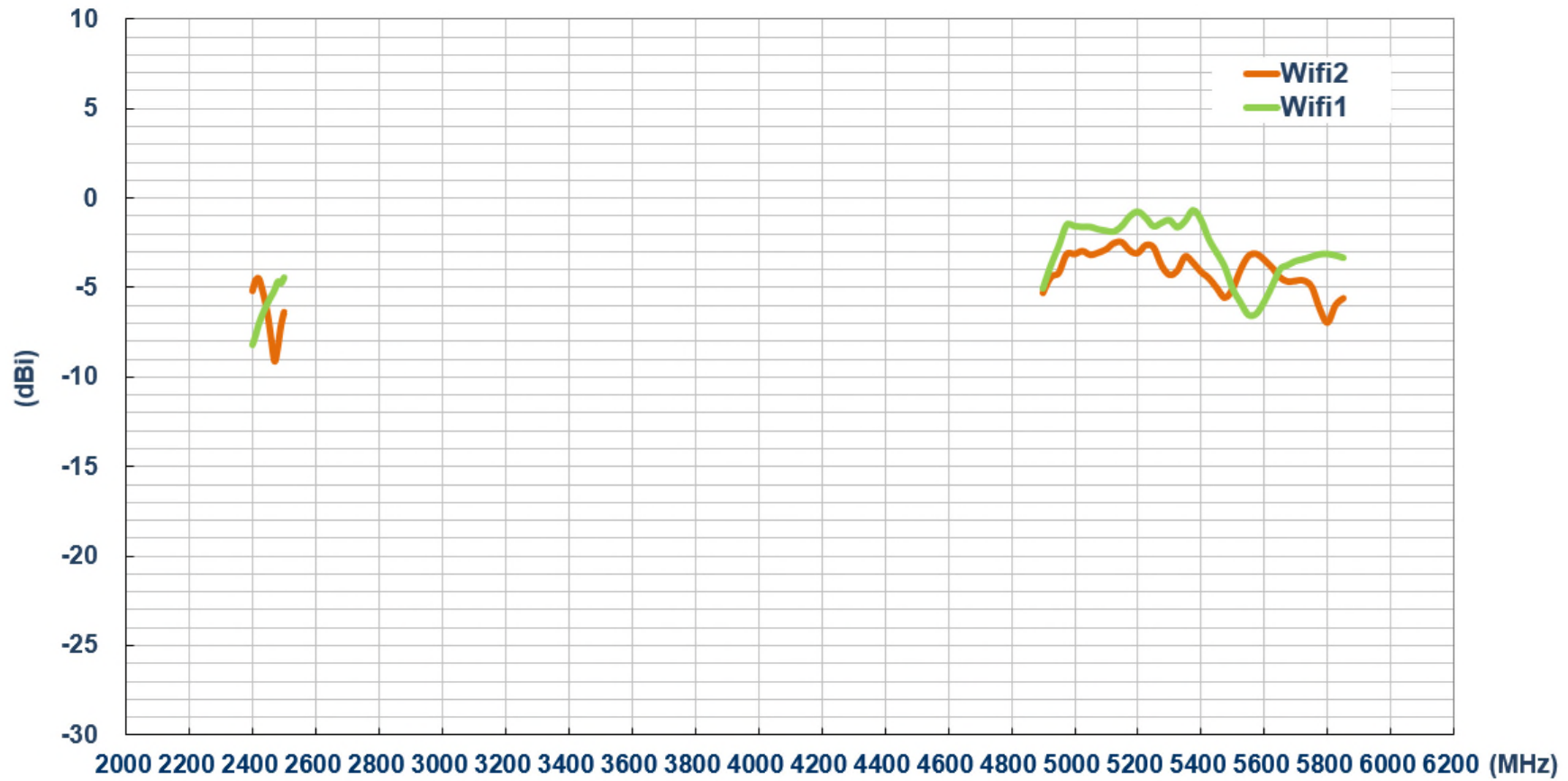
Efficiency



Average Gain



Peak Gain



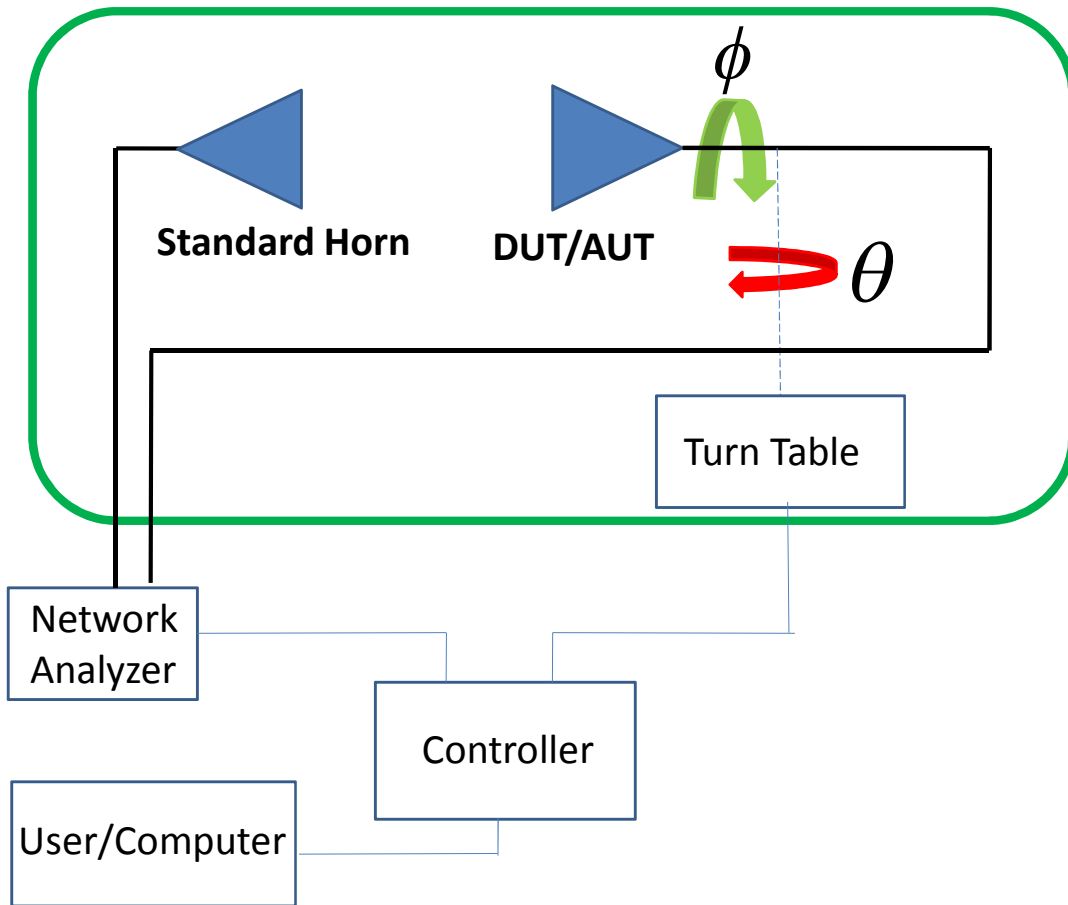
Performance table

Average	WiFi 2.4G	WiFi 5G
Frequency (MHz)	2400~2500	4900~5850
Efficiency (%)		
Wifi 1	10.4	13.1
Wifi 2	6.9	9.4
Peak Gain (dBi)		
Wifi 1	-4.5	-0.7
Wifi 2	-4.5	-2.5
Average Gain (dB)		
Wifi 1	-9.8	-8.9
Wifi 2	-11.6	-10.3

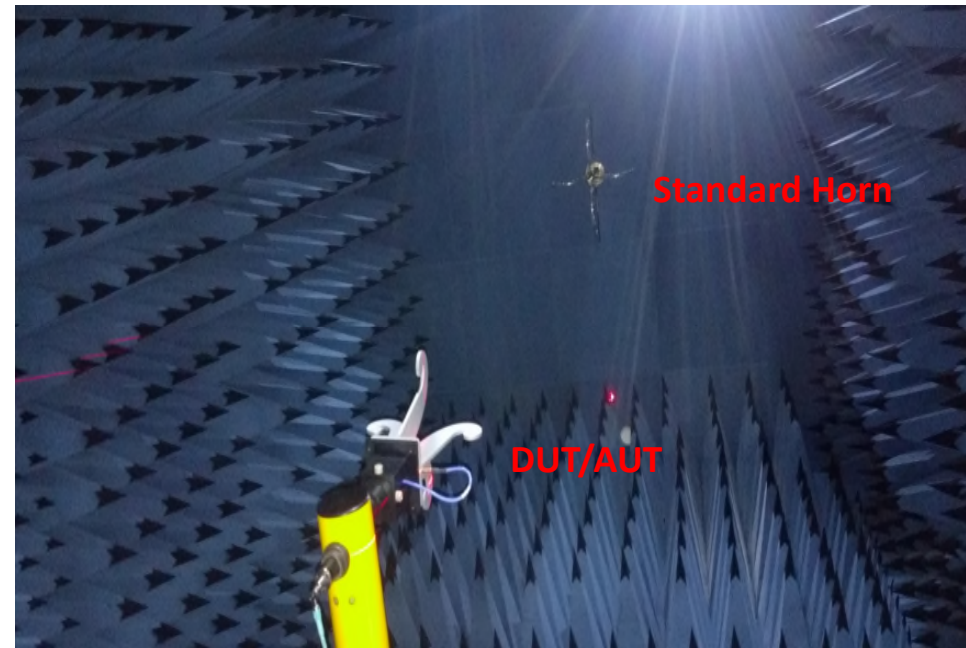


Chamber Environmental

Measurement System



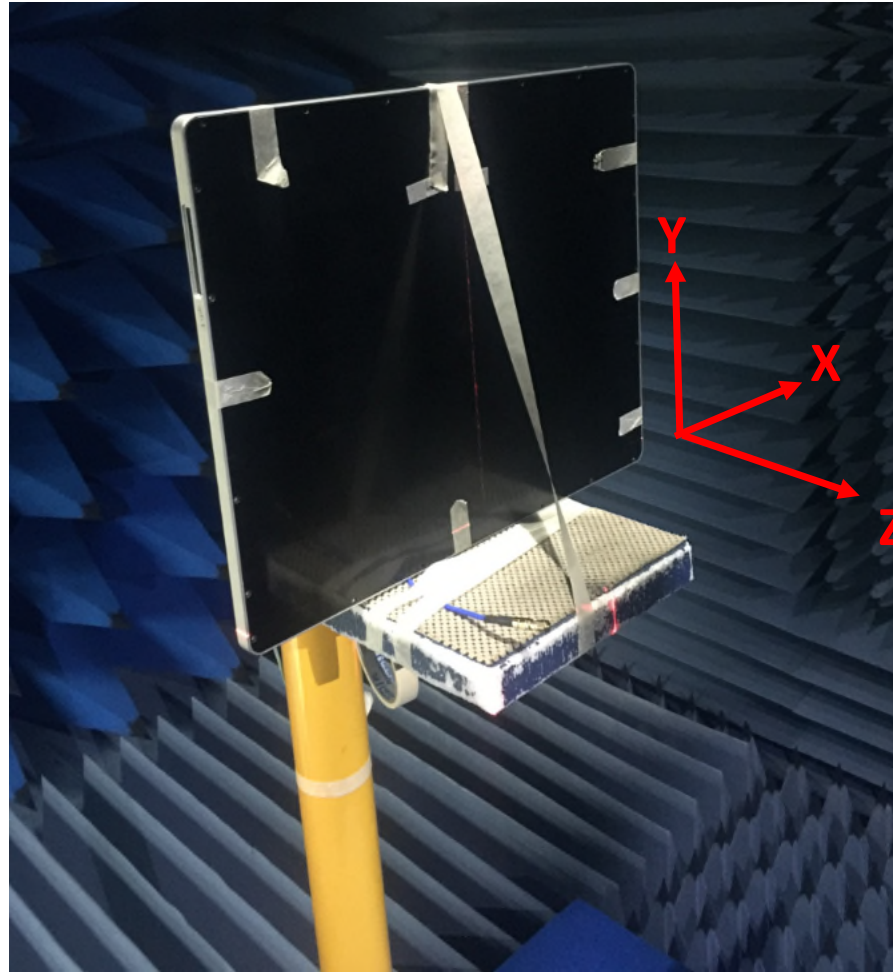
Anechoic Chamber



Confidential

Chamber Environmental

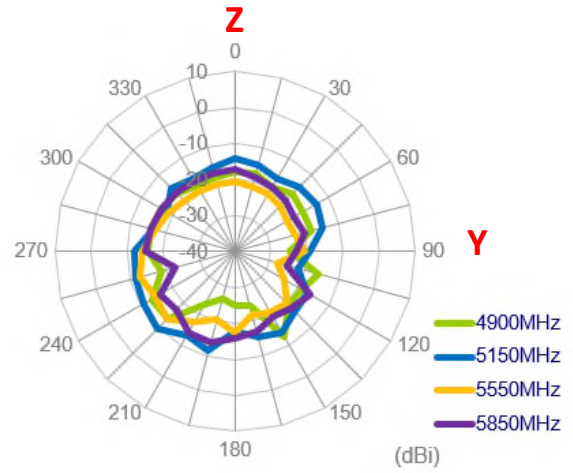
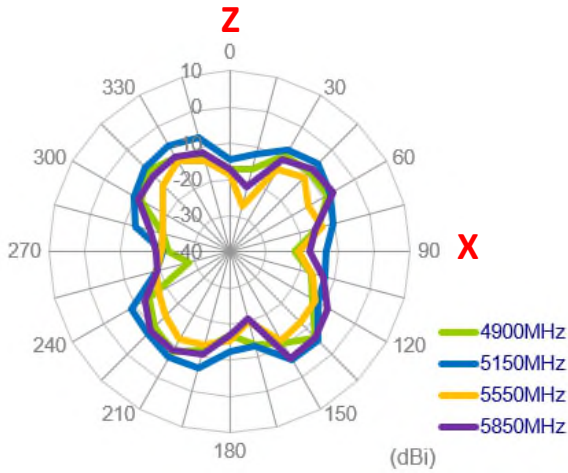
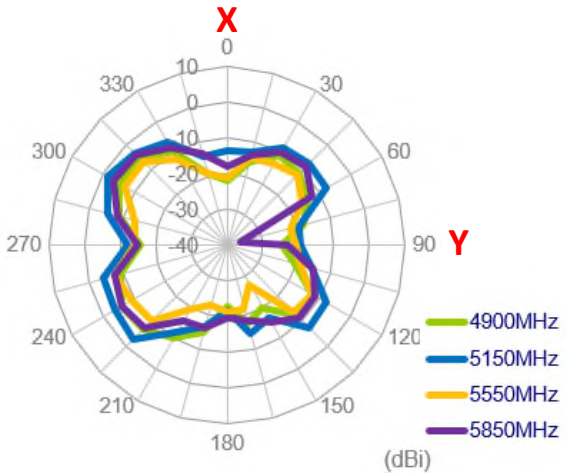
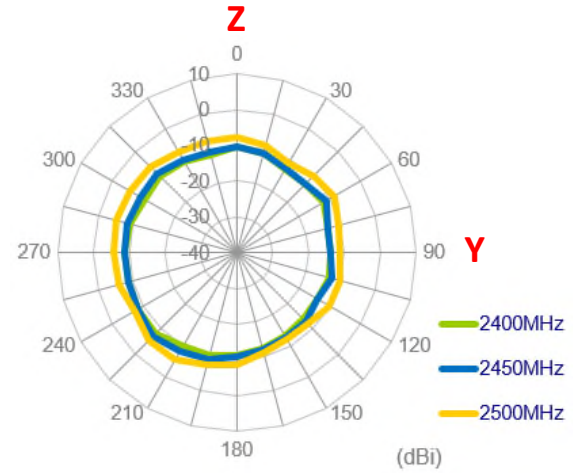
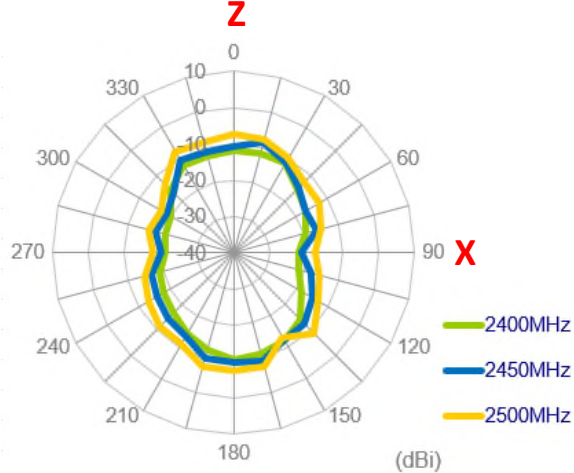
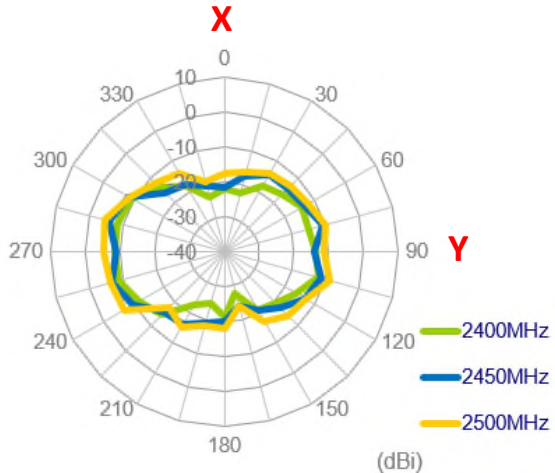
Measurement



Confidential



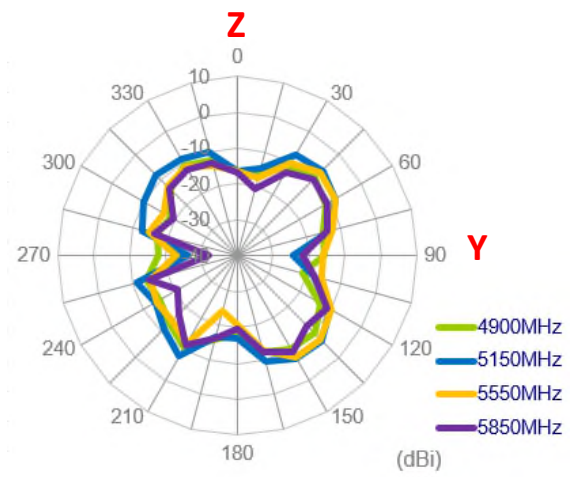
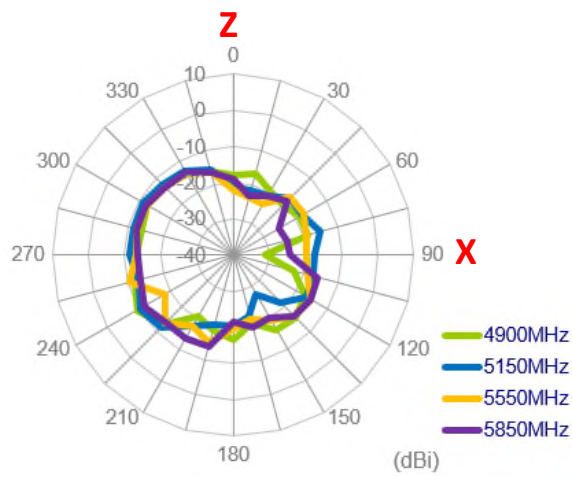
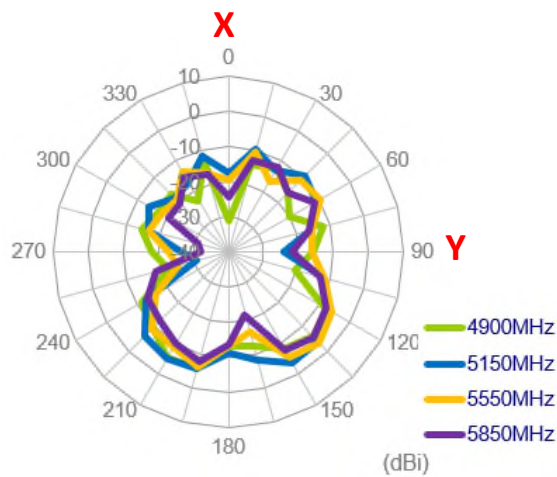
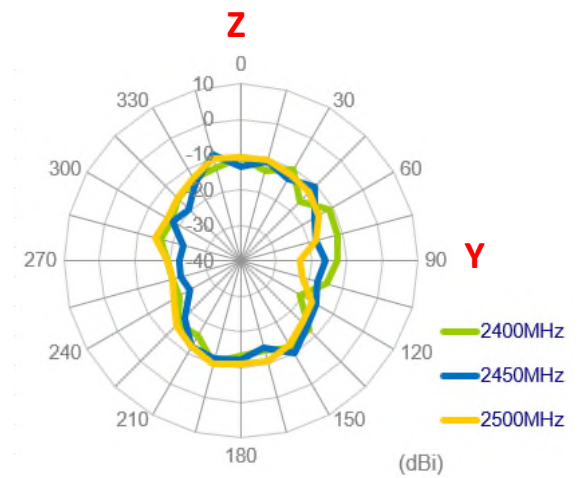
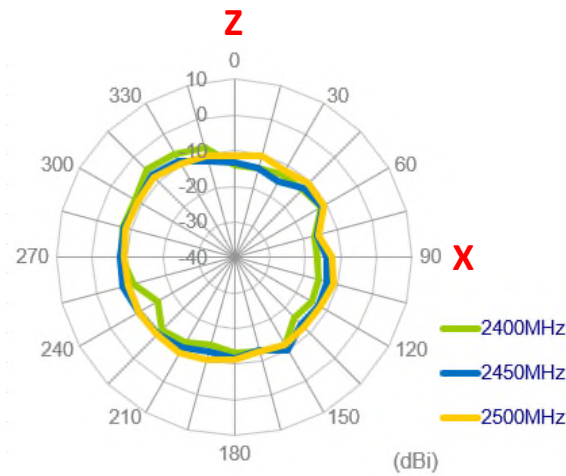
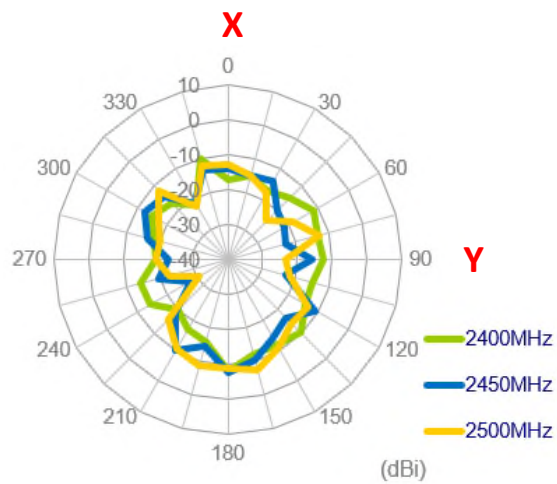
Antenna 2D Radiation Patterns : Wifi 1



Confidential



Antenna 2D Radiation Patterns : Wifi 2





Ireland

Unit 5 Kilcannon Business Park
Old Dublin Road
Enniscorthy, Co. Wexford
Y21 XW56, Ireland

+353 53 9169500
emeasales@taoglas.com

Taiwan

No.2-2, Ln. 66, ZhongShan 1st Rd.
Bade City, Taoyuan County
33454
Taiwan, ROC

+886 3 3681223
asiasales@taoglas.com

United States - CA

8375 Camino Santa Fe,
Suite A & B
San Diego, CA 92121
United States

+1 858 450 0888
nasales@taoglas.com

United States - MN

530 N 3rd St.
Suite B10
Minneapolis, MN 55401-1256
United States

+1 858 450 0888
nasales@taoglas.com

Germany

Erika-Mann-Straße 25
80636 München
Germany

+49 89 3803 7426
emeasales@taoglas.com

www.taoglas.com

Confidential

