



Meraki Neu-Wanda Antenna Test Report

May 21, 2024

Prepared by Jerry Ko

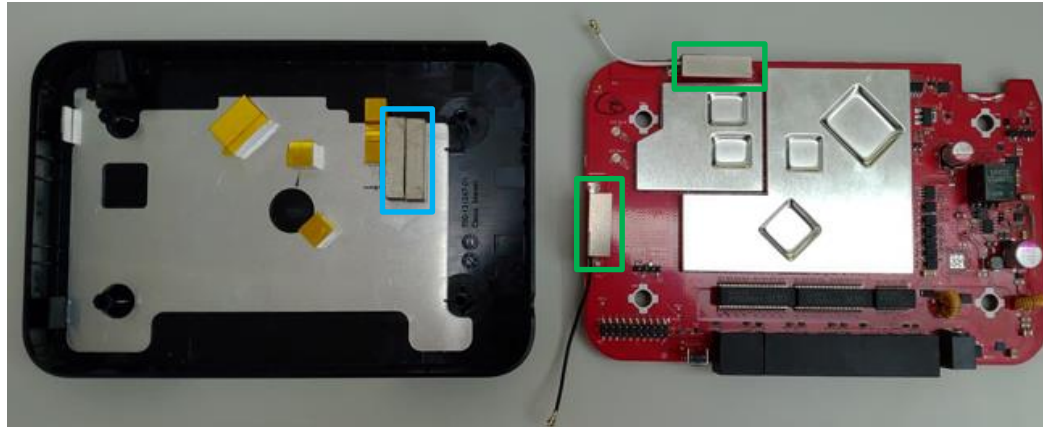
Outline

- Antenna Structure & Placement
- Return Loss & Isolation
- Radiation Pattern
- Directional Gain Pattern
- Peak Gain & Efficiency

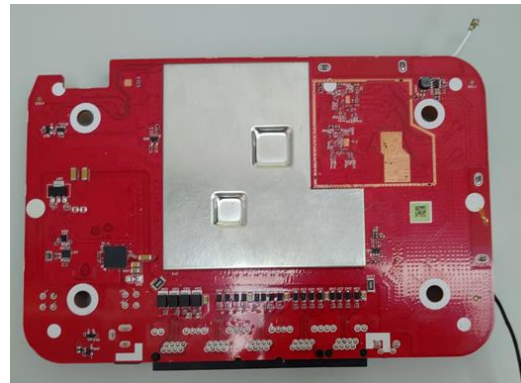
SERCOMM

8F, No. 3-1, Yuan Qu St., Nan Kang, Taipei 115, Taiwan

Antenna Structure & Placement



(TOP View)

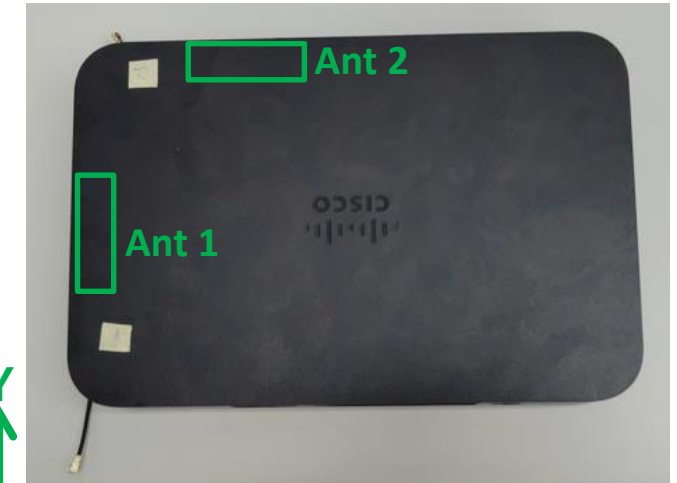


(BOT View)

 Gasket
 Antenna

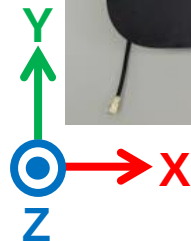
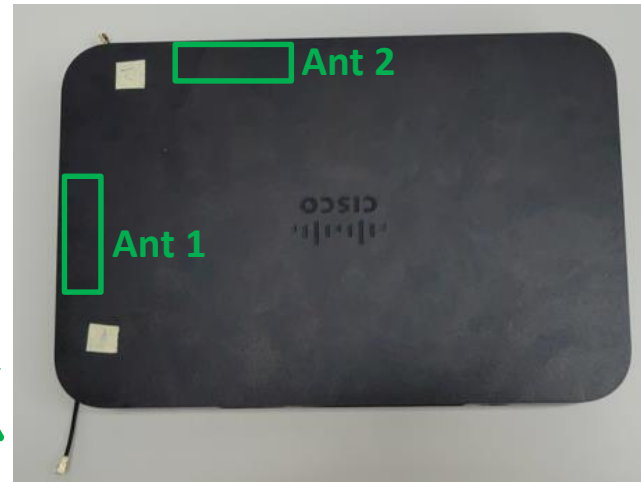
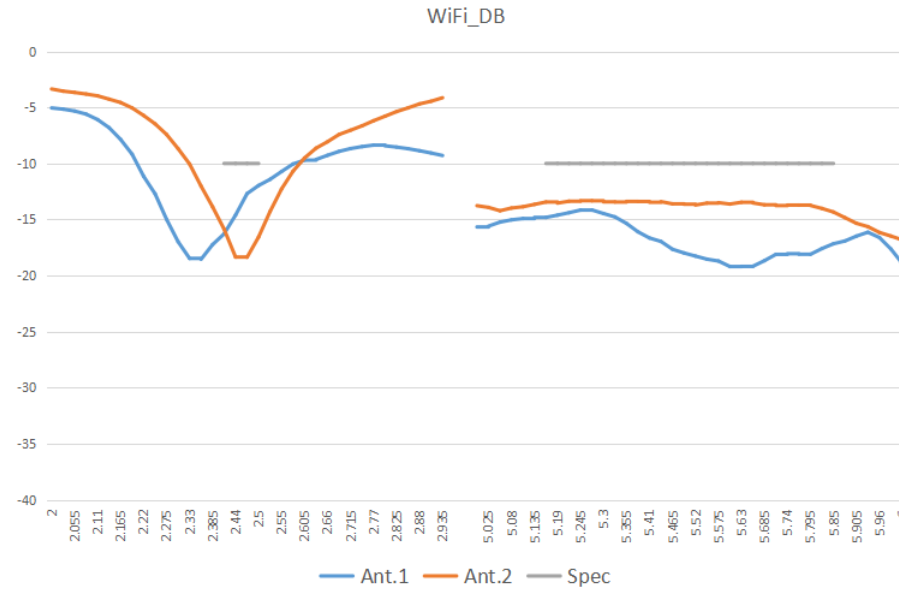
Housing Version : Neu-Wanda housing

PCBA Version : EVT

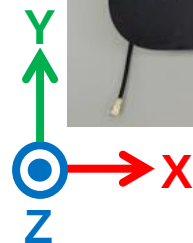
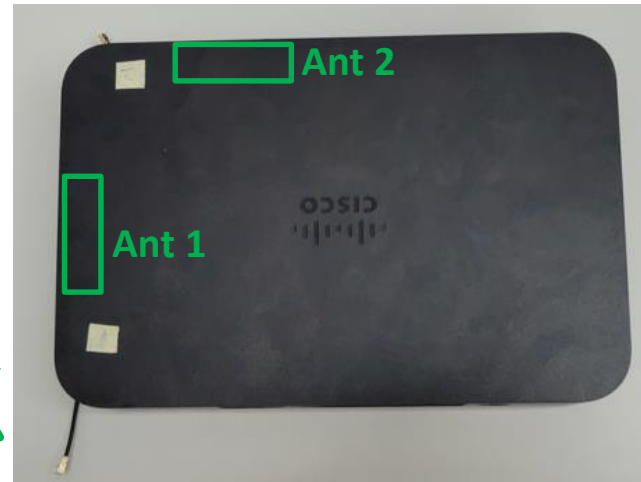
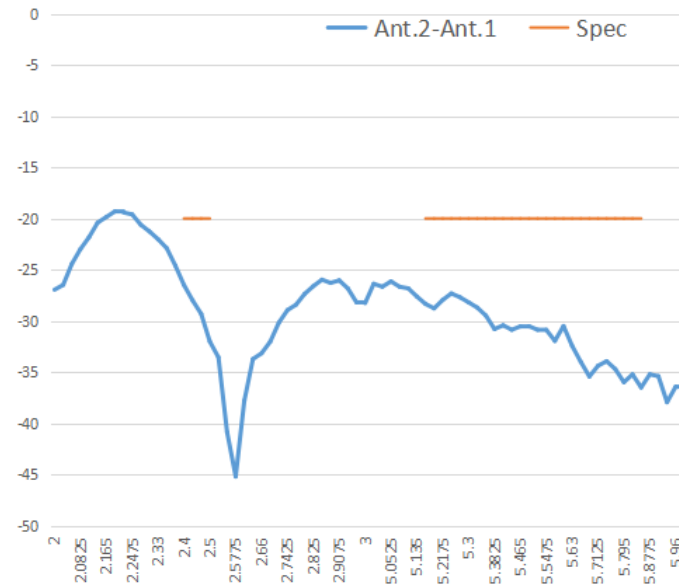


Ant No.	Ext. / Int.	Operating Band	Model Name	Type	Material	Feeding	Dimension
Ant 1	Internal	WiFi 2.4G/5G	6172006CWA	PIFA	Metal	Cable	32 x 8 x 13 mm ³
Ant 2	Internal	WiFi 2.4G/5G	6172006DWA	PIFA	Metal	Cable	32 x 8 x 13 mm ³

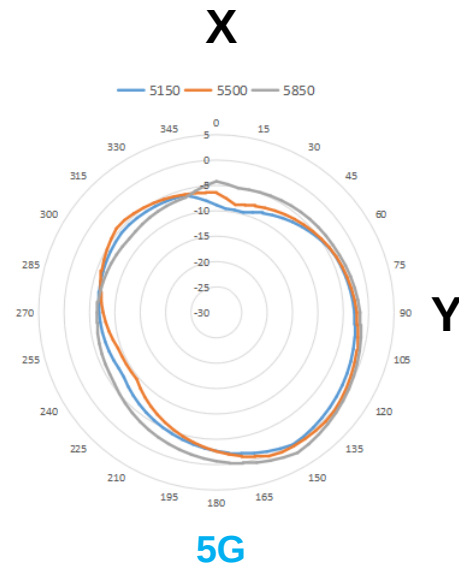
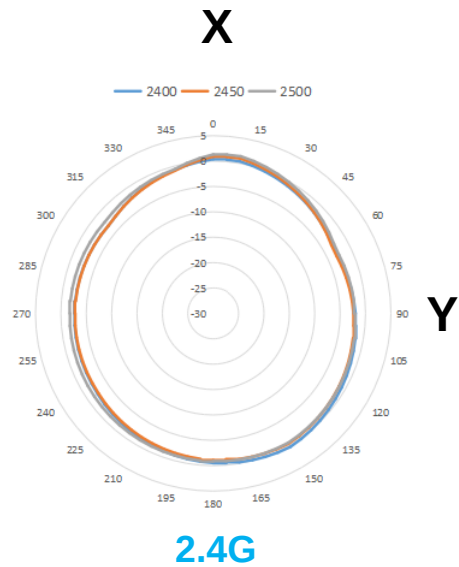
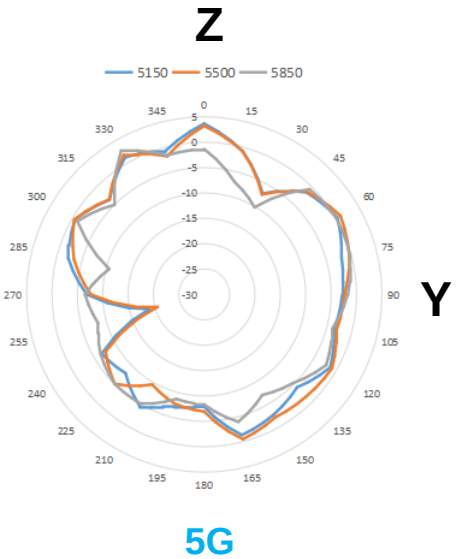
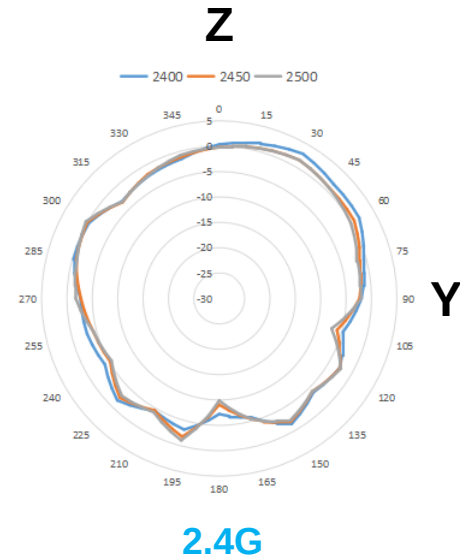
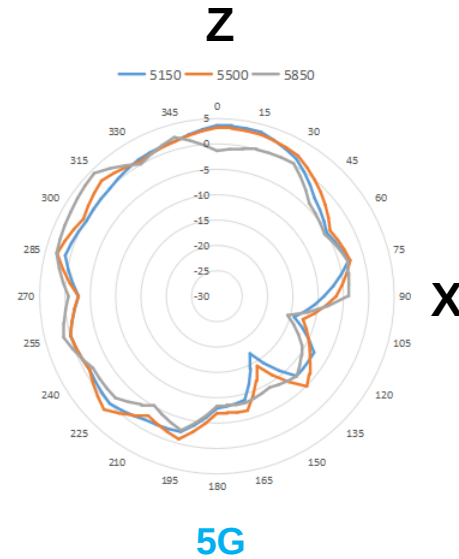
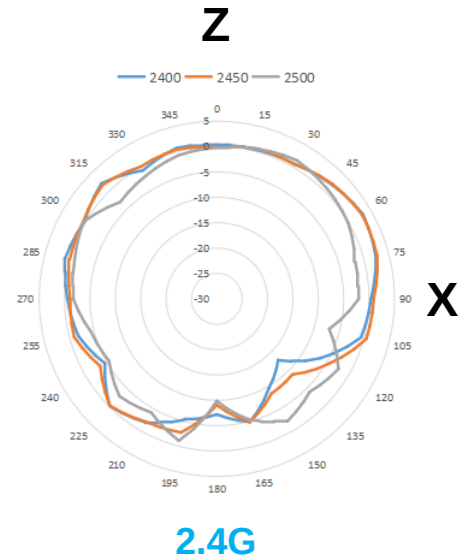
Return Loss @ WiFi_DB



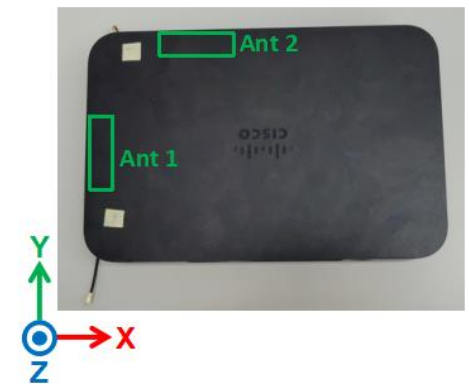
Isolation @ WiFi_DB



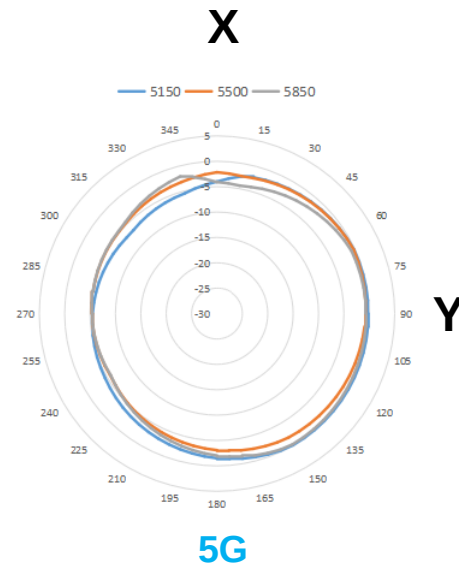
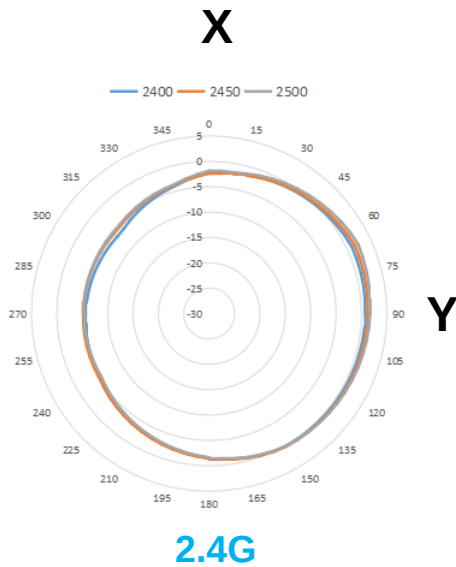
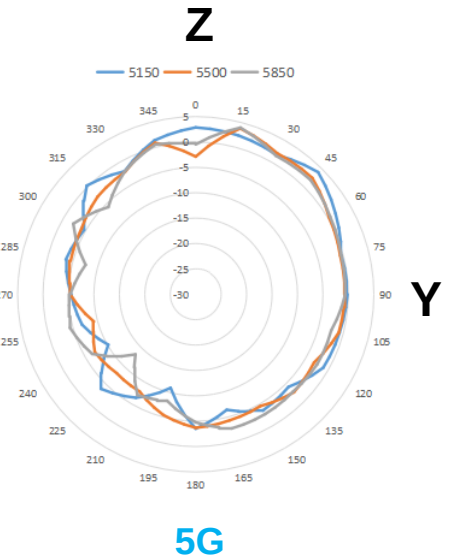
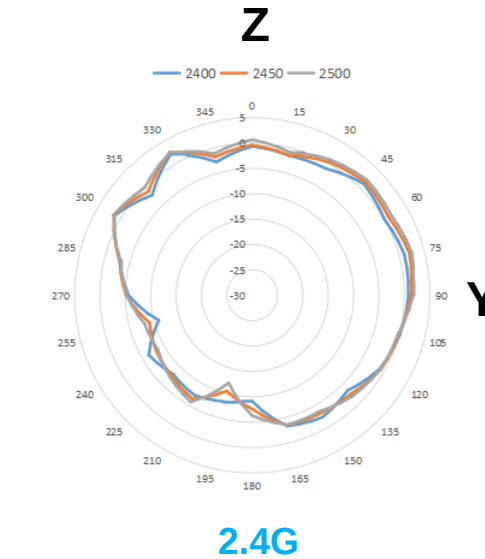
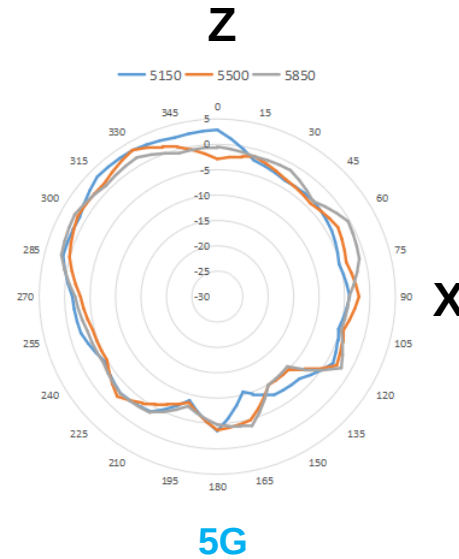
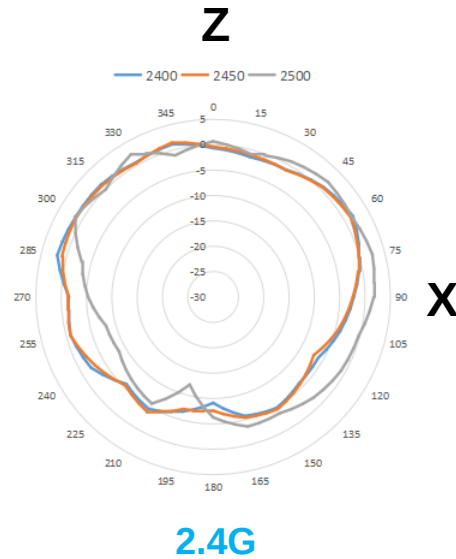
2D Radiation Pattern – Ant 1



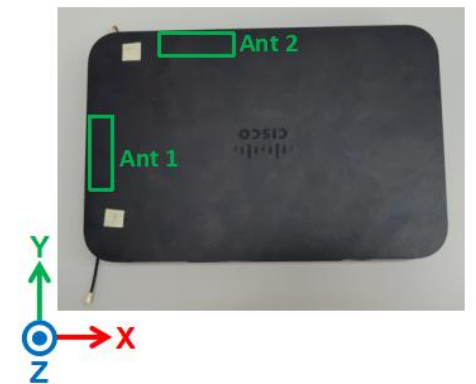
Frequency (MHz)	Ripple (dB)
2400	3.4
2450	4.1
2500	4.0
5150	9.6
5500	9.9
5850	9.4



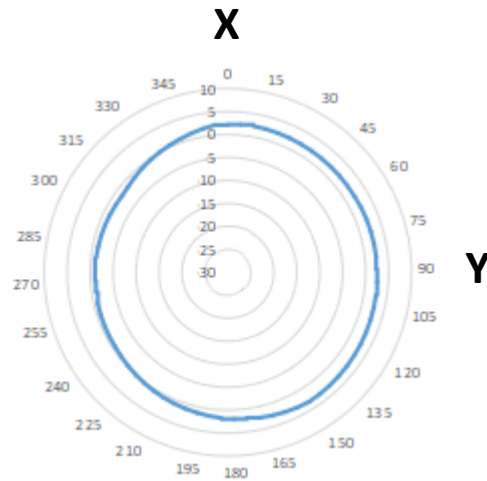
2D Radiation Pattern – Ant 2



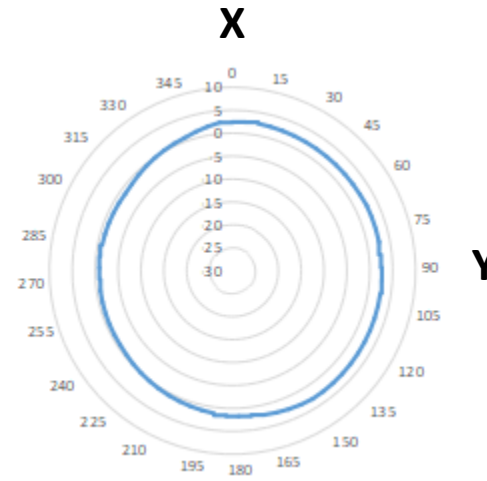
Frequency (MHz)	Ripple (dB)
2400	7.4
2450	7.1
2500	7.7
5150	6.6
5500	5.4
5850	5.5



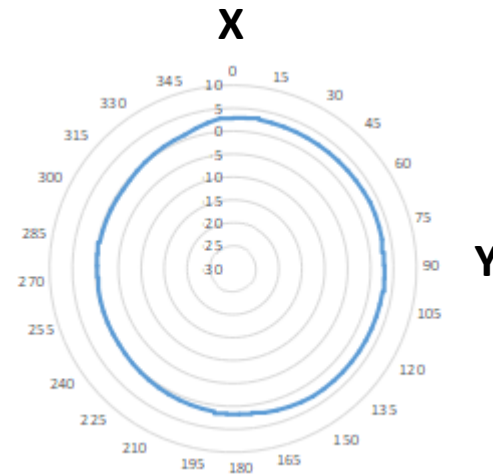
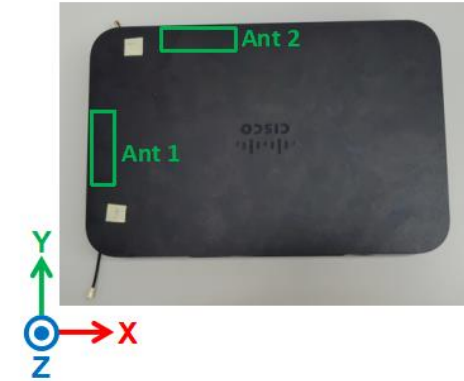
Directional Gain Pattern @ WiFi 2G



WiFi DB @ 2400 MHz



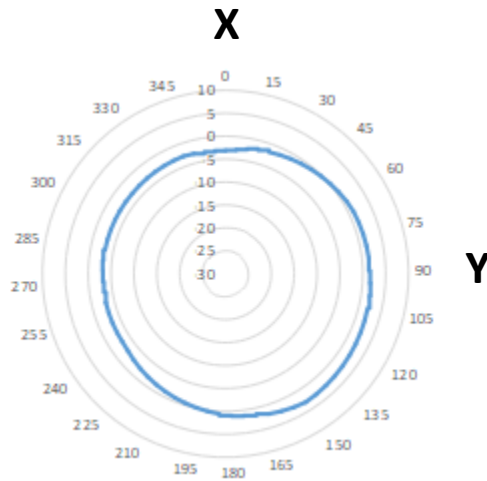
WiFi DB @ 2450 MHz



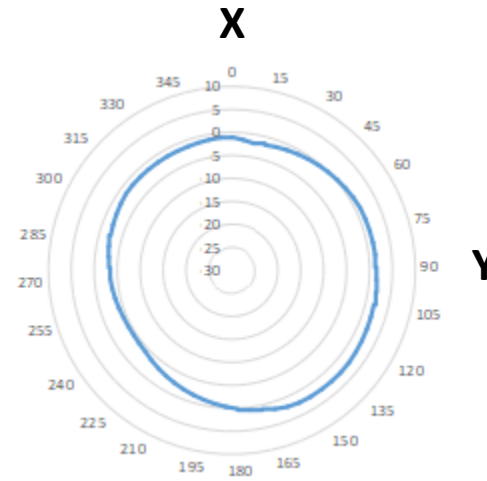
WiFi DB @ 2500 MHz

XY plane	Ripple (dB)	Directional Gain (dB)	Peak Gain (dBi)	
			Ant 1	Ant 2
-	-	-	Ant 1	Ant 2
2400 MHz	4.8	6.1	3.6	3.3
2450 MHz	4.1	5.8	3.6	3.6
2500 MHz	3.7	6.0	3.8	3.4

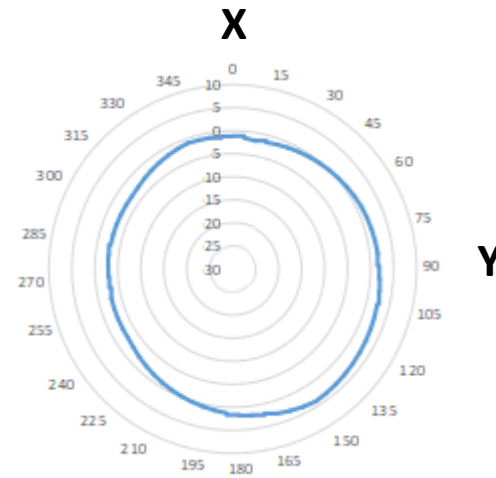
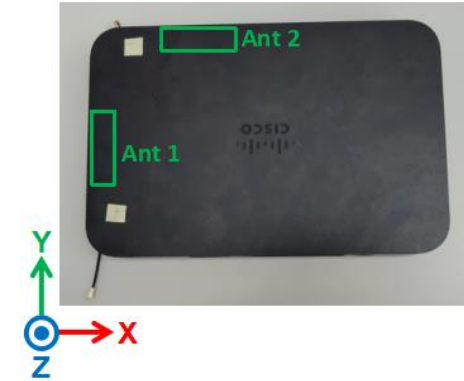
Directional Gain Pattern @ WiFi 5G



WiFi DB @ 5150 MHz



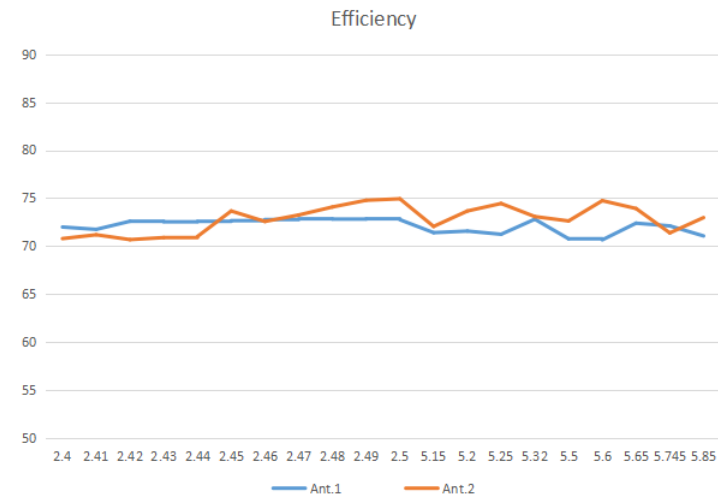
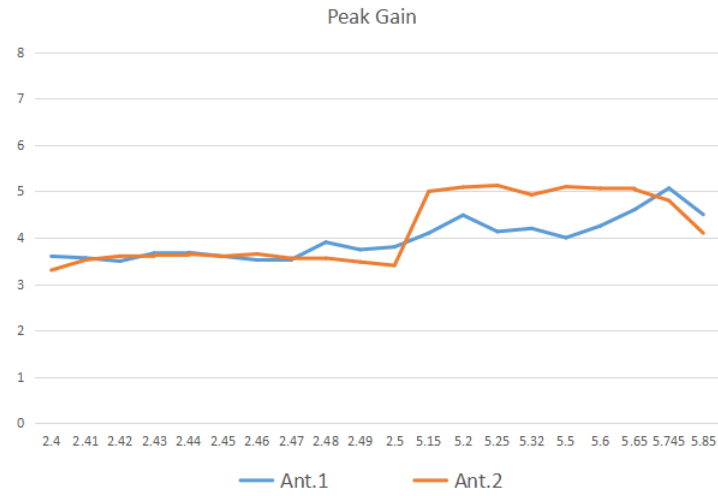
WiFi DB @ 5500 MHz



WiFi DB @ 5850 MHz

XY plane	Ripple (dB)	Directional Gain (dB)	Peak Gain (dBi)	
-	-	-	Ant 1	Ant 2
5150 MHz	6.1	7.3	4.1	5.0
5500 MHz	6.9	6.8	4.0	5.1
5850 MHz	6.9	6.3	4.5	4.1

Peak Gain & Efficiency



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