



BB02

Antenna Specifications

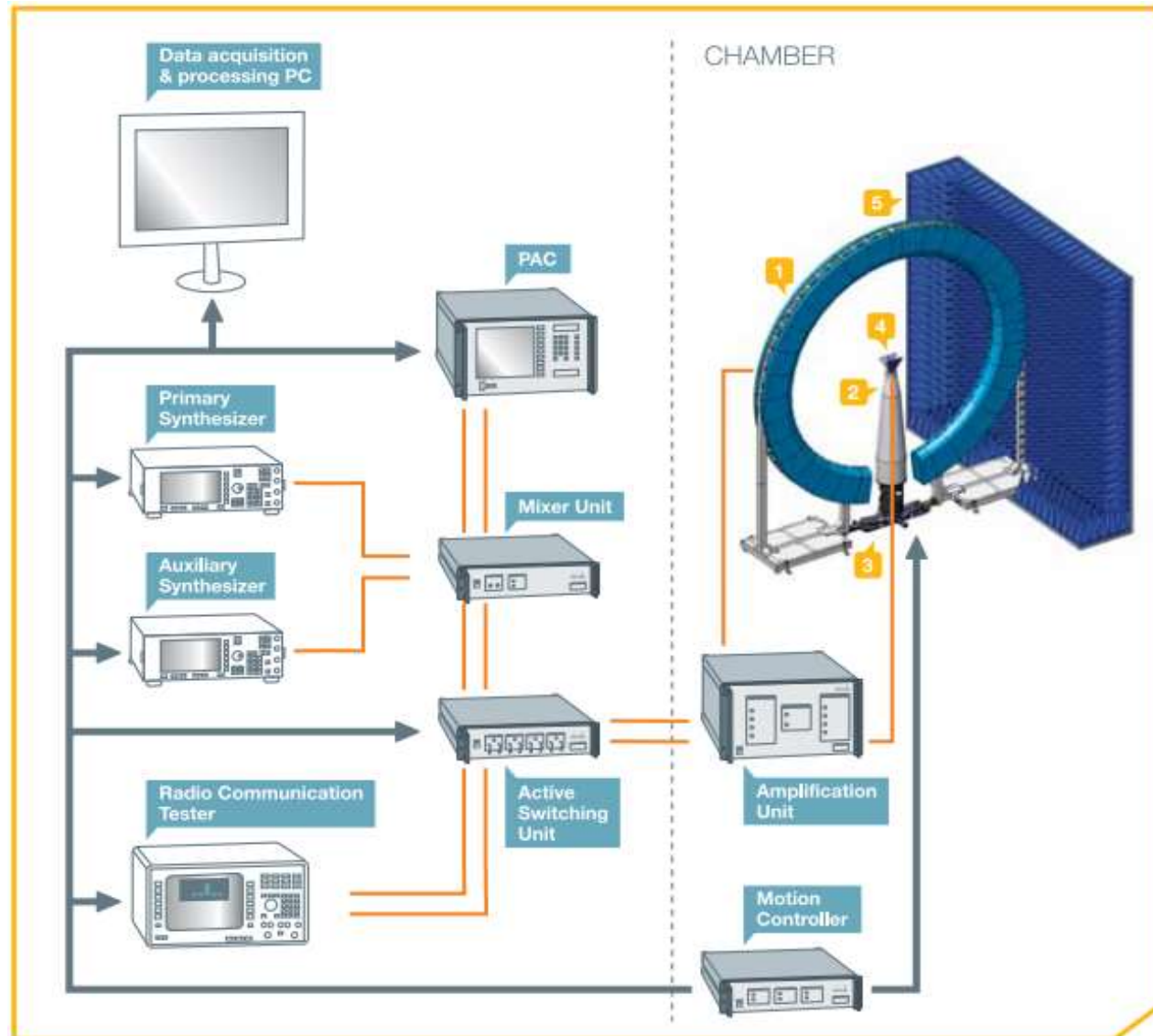
2025/07/24

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Test Setup

- SG64 Diagram :



Test Setup

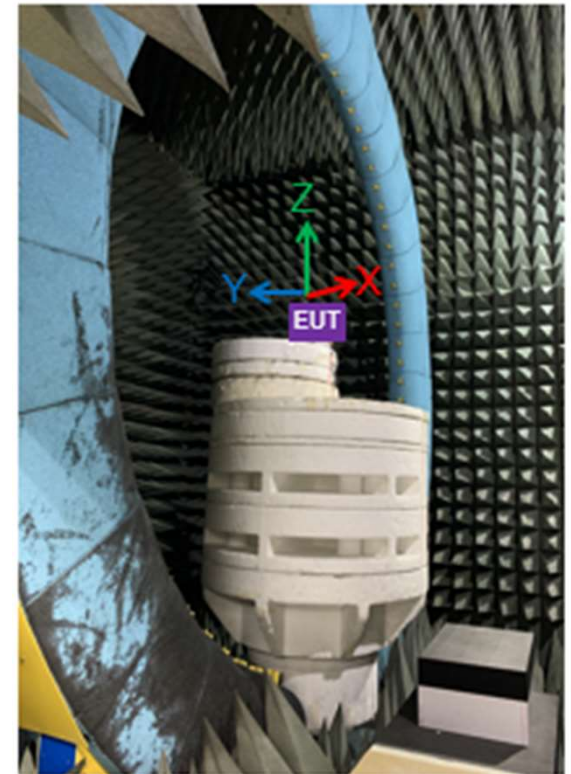
- **SG64 Equipment :**

Device	Type/Model	Serial#	Manufacturer	Calibrated Date	Calibrated Until
SG64 Chamber	Standard	SG64	MVG	2024/07/12	2025/08/30
Turn Table	Customization	-	Machinery Dept.	2024/07/12	2025/08/30
Probe Array Controller	N/A	1102341-4535	MVG	2024/07/12	2025/08/30
Power Supply Unit	N/A	1103211-13204	MVG	2024/07/12	2025/08/30
Active Switching Unit	N/A	1102347-7214	MVG	2024/07/12	2025/08/30
TX Amplification Unit	N/A	1102527-5909	MVG	2024/07/12	2025/08/30
RX Amplification Unit	N/A	1102536-3823	MVG	2024/07/12	2025/08/30
Transfer Switching Unit	N/A	1102183-3351	MVG	2024/07/12	2025/08/30
Mixer Unit	N/A	1102545-7208	MVG	2024/07/12	2025/08/30
Power And Control Unit	N/A	1102706-7209	MVG	2024/07/12	2025/08/30
Antenna Probe	DP 400-6000	-	MVG	2024/07/12	2025/08/30
Cable 13.7m 400MHz to 18GHz	SS402	00100A1F5A1XXS	Woken	2024/07/12	2025/08/30
Temperature & Humidity Meter	HTC-01	-	METRAVI	2024/07/12	2025/08/30

Test Setup

- **Measurement procedure**

1. Put DUT on test table.
2. Connect the coaxial cable to DUT.
3. Record power from DUT antenna with test SW.
4. Finish all power measurement from other grids.
5. Output the test data for PC data management.



Information

● Operation Frequency:

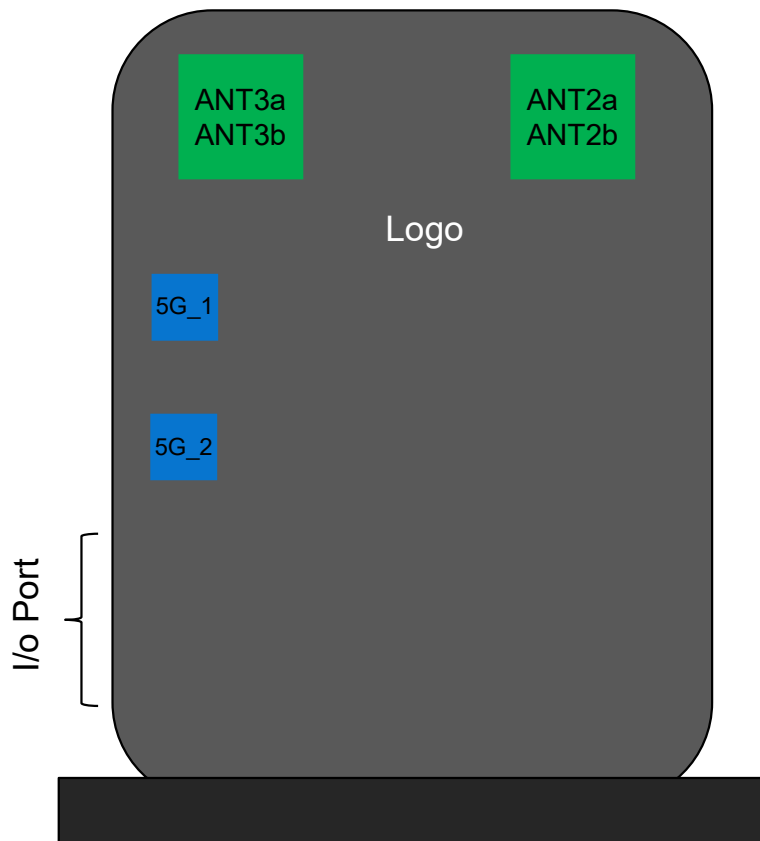
- WLAN Antenna :
 - 5G_1 Scanning (5150 ~ 5350 MHz)
 - 5G_2 Scanning (5470 ~ 5850 MHz)
 - ANT2a : 2.4G (2400 ~ 2500MHz) + 5G (5150 ~ 5350 MHz)
 - ANT2b : 5G (5470 ~ 5850 MHz)
 - ANT3a : 2.4G (2400 ~ 2500MHz) + 5G (5150 ~ 5350 MHz)
 - ANT3b : BT (2400 ~ 2500MHz) + 5G (5470 ~ 5850 MHz)

● Test Date and Member

- Date : 2021/12/14
- Member : Wen-Tsan Chung

Information

● Antenna Placement



Antenna	Band	Frequency (MHz)
5G_1	Scanning	5150 ~ 5350
5G_2	Scanning	5470 ~ 5850
ANT2a	2.4G	2400 ~ 2500
	5G (Low)	5150 ~ 5350
ANT2b	5G (High)	5470 ~ 5850
ANT3a	2.4G	2400 ~ 2500
	5G (Low)	5150 ~ 5350
ANT3b	BT	2400 ~ 2500
	5G (High)	5470 ~ 5850

Antenna specifications

● Antenna Placement

Antenna	Type	Polarization	Brand	Model	Cable Length	Connector Type
5G_1	PIFA	Linear	WNC	WHVA1	N/A	N/A
5G_2	PIFA	Linear	WNC	WHVA1	N/A	N/A
ANT2a	Dipole	Linear	WNC	48XKAB18	78mm (White)	MHF-I
ANT2b	Dipole	Linear	WNC		39mm (Red)	MHF-I
ANT3a	Dipole	Linear	WNC	48XKAB19	29mm (Black)	MHF-I
ANT3b	Dipole	Linear	WNC		75mm (Green)	MHF-I

Antenna specifications

- **Antenna Peak Gain :**

Scanning	Frequency Range (MHz)	Peak Gain (dBi)
5G_1	5150 ~ 5350	4.5
5G_2	5470 ~ 5850	4.5

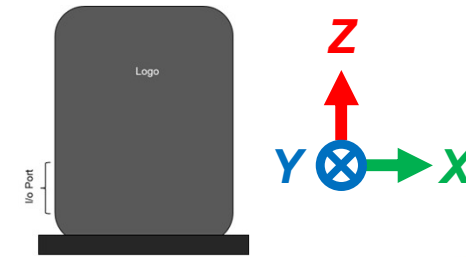
ANT2	Frequency Range (MHz)	Peak Gain (dBi)
ANT2a	2400 ~ 2500	3.5
	5150 ~ 5350	3.1
ANT2b	5470 ~ 5850	3.6

ANT3	Frequency Range (MHz)	Peak Gain (dBi)
ANT3a	2400 ~ 2500	2.7
	5150 ~ 5350	3.7
ANT3b	2400 ~ 2500	2.9
	5470 ~ 5850	3.5

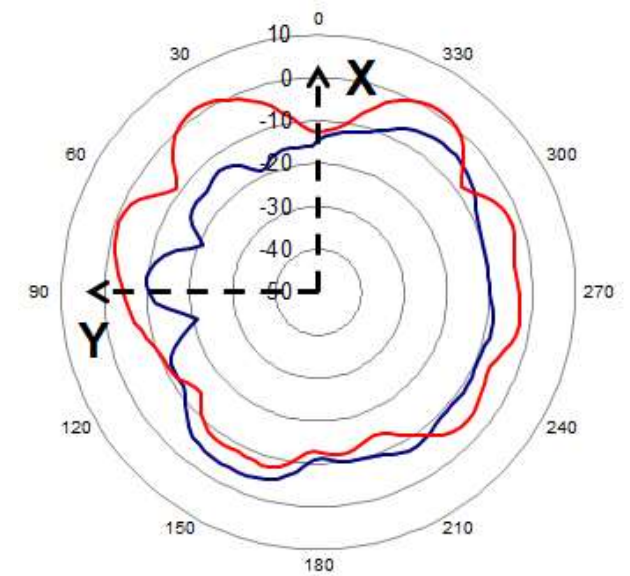
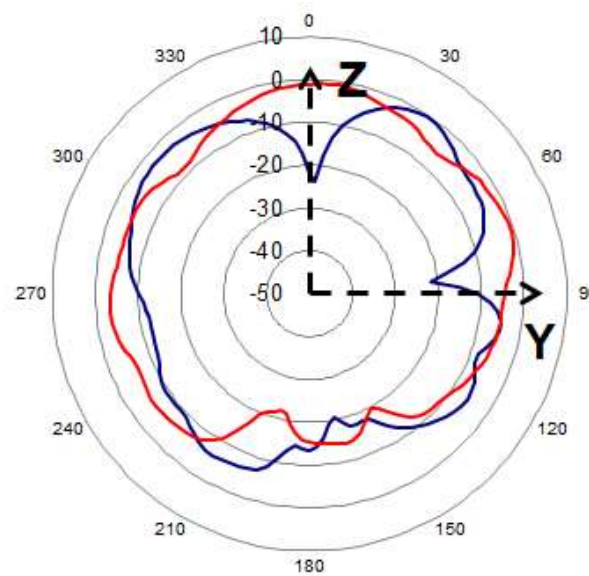
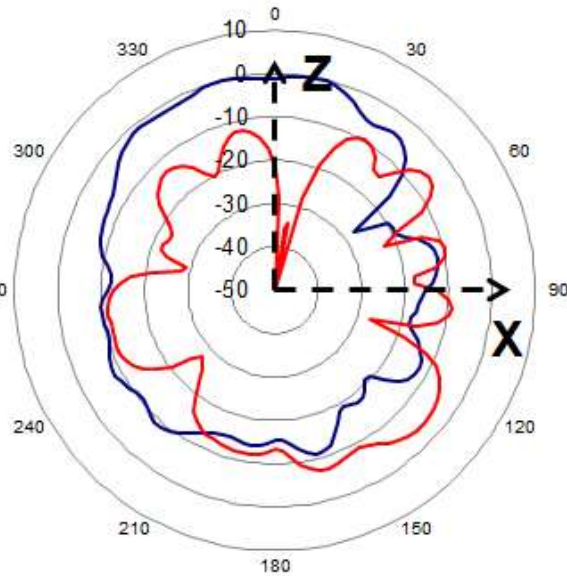
Radiation Pattern

● 5G Scanning Antenna

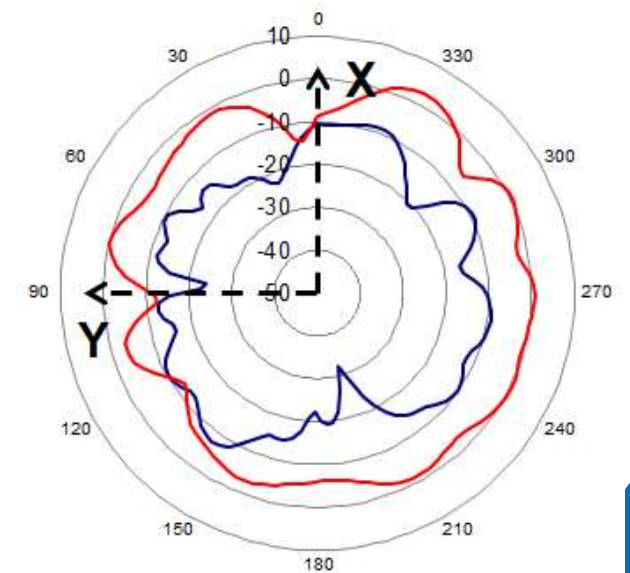
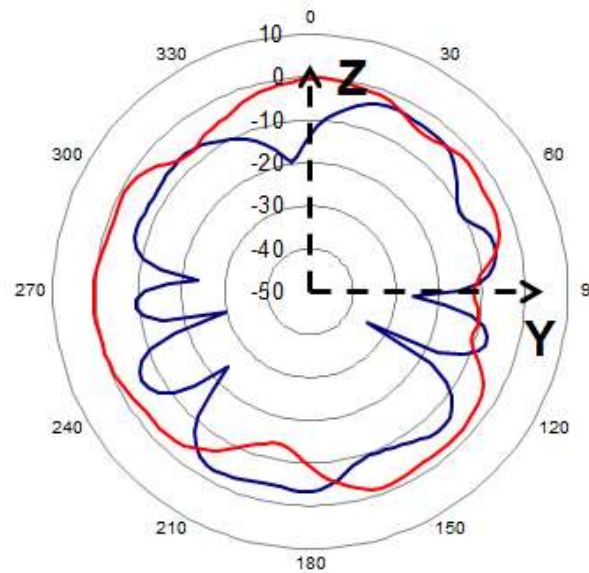
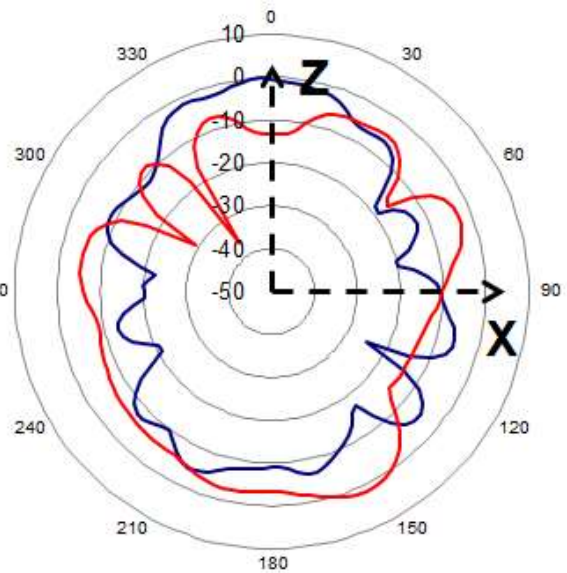
— V-Pol
— H-Pol



5G_1



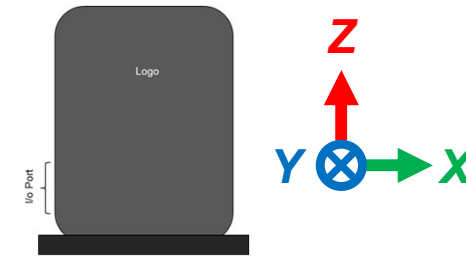
5G_2



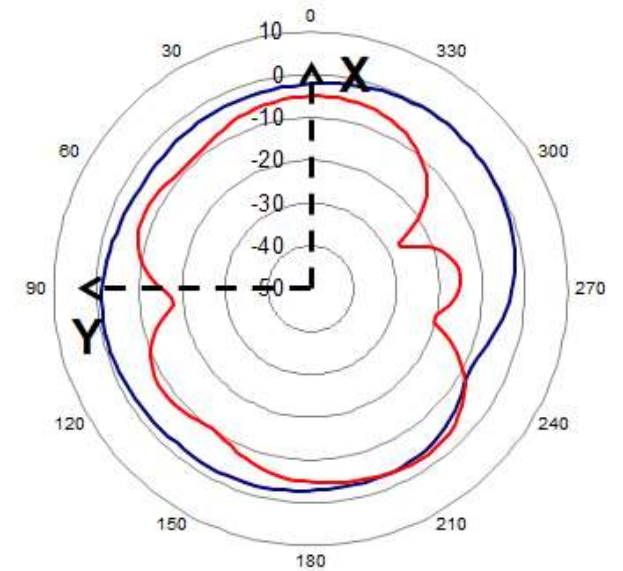
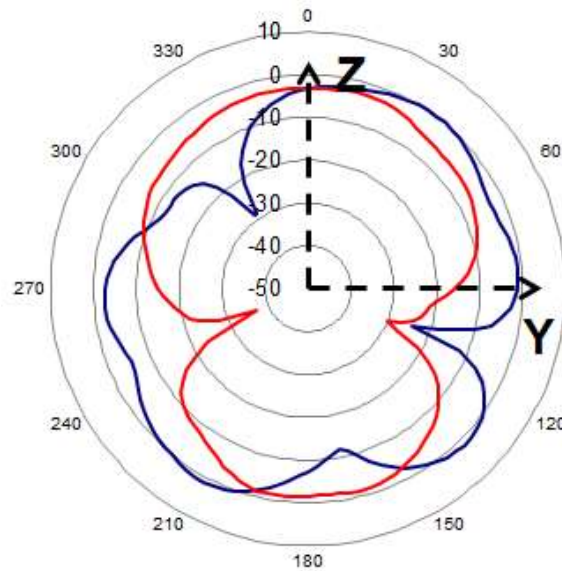
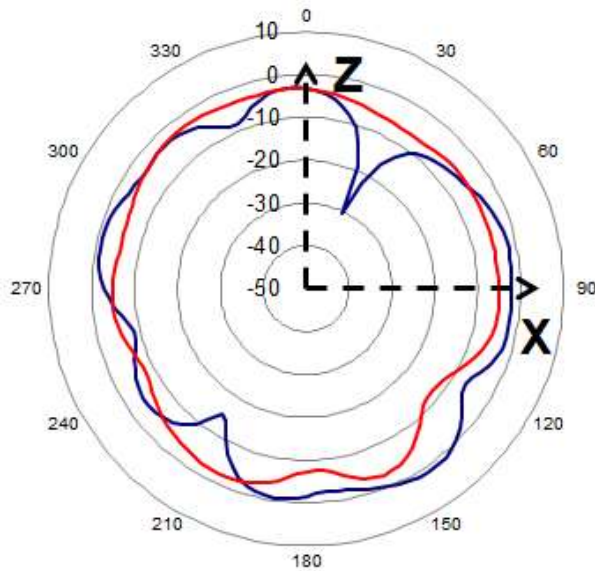
Radiation Pattern

● ANT2a Antenna

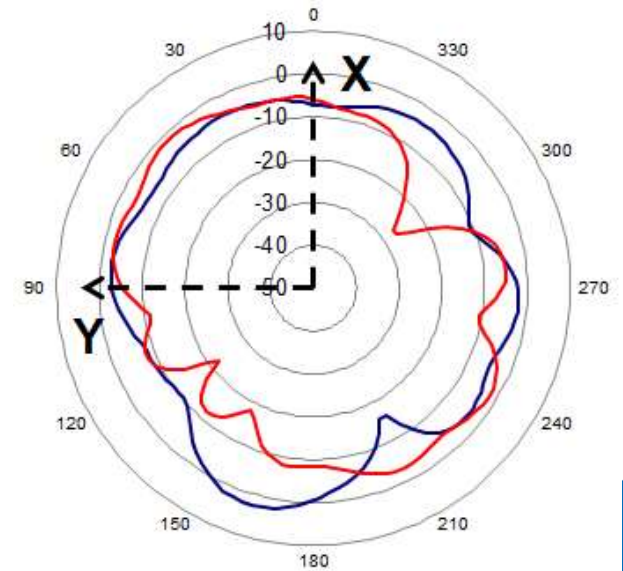
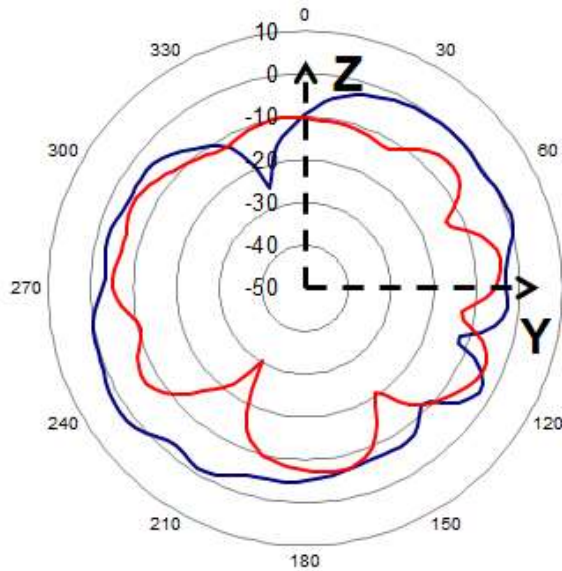
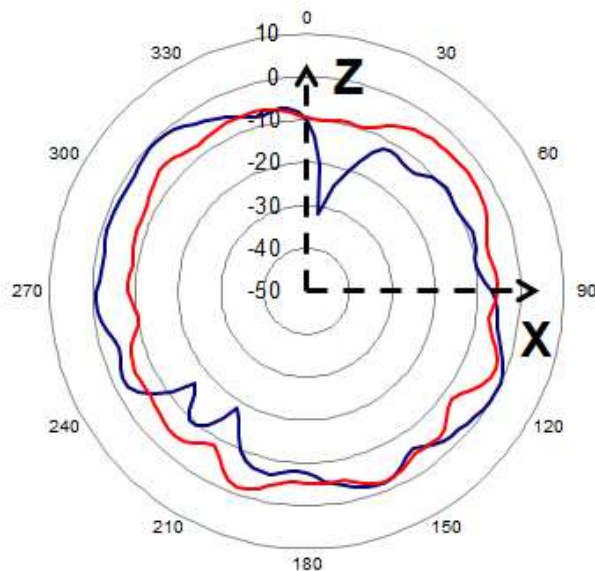
— V-Pol
— H-Pol



2.4G



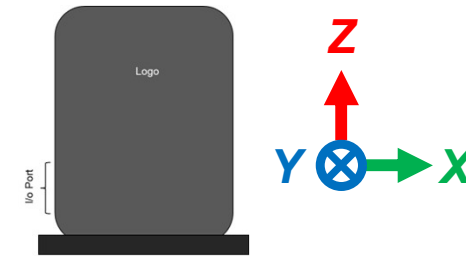
5G



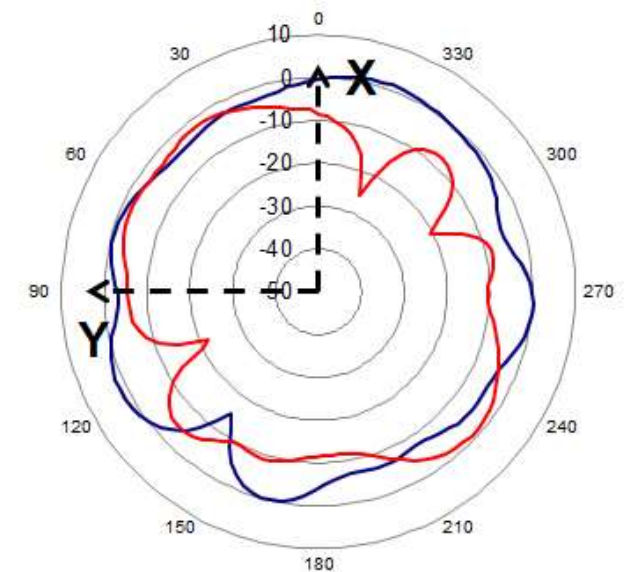
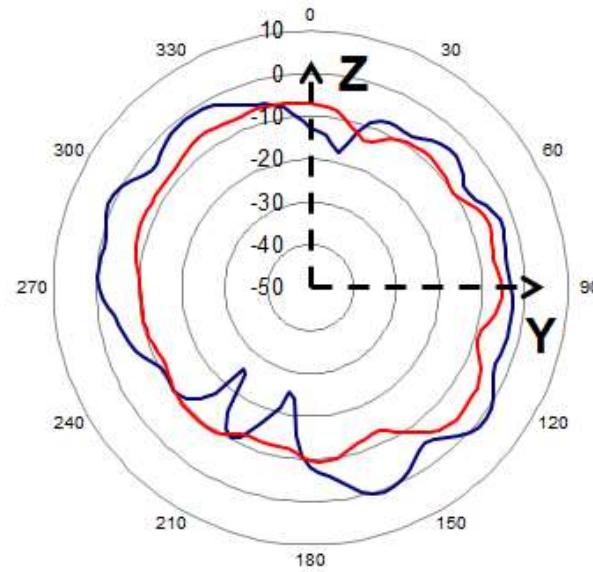
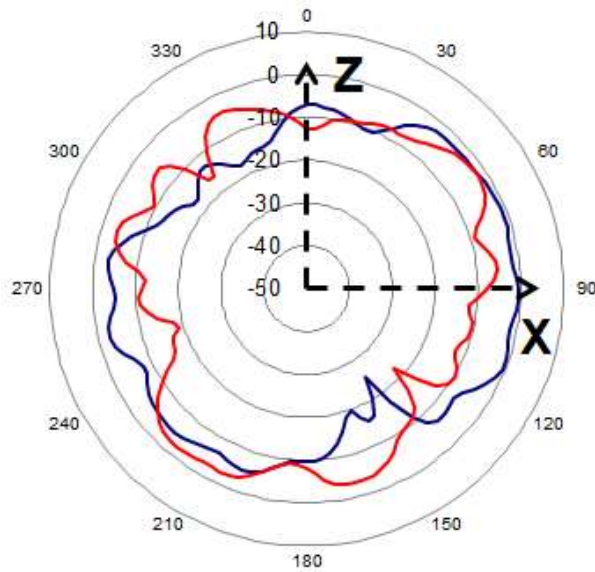
Radiation Pattern

- ANT2b Antenna

— V-Pol
— H-Pol



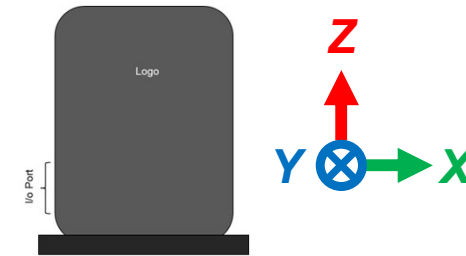
5G



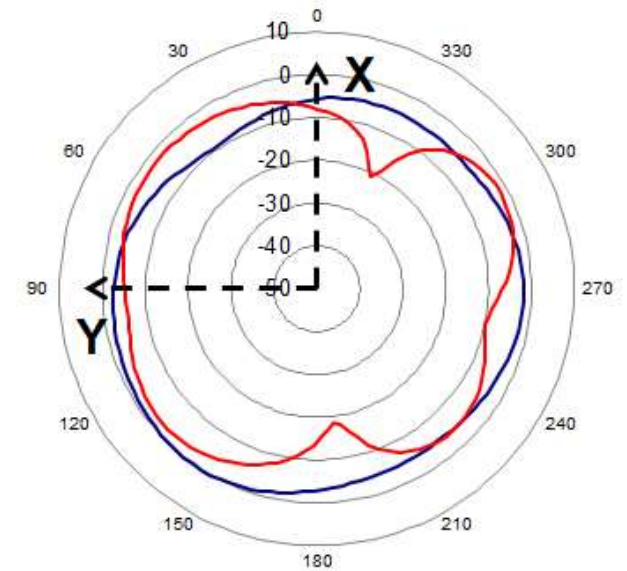
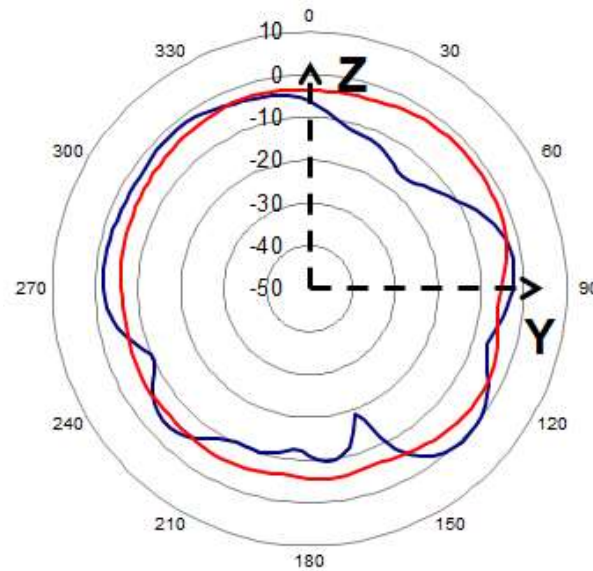
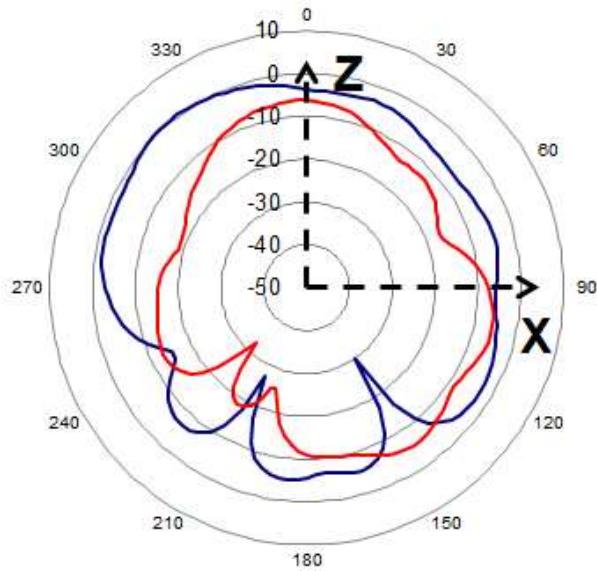
Radiation Pattern

● ANT3a Antenna

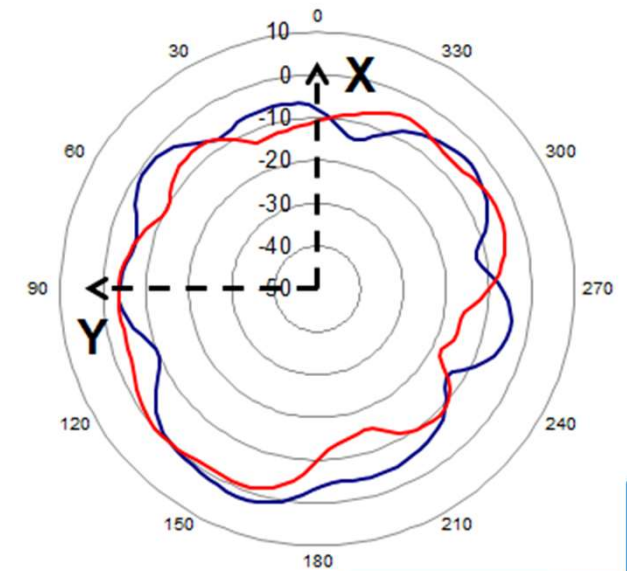
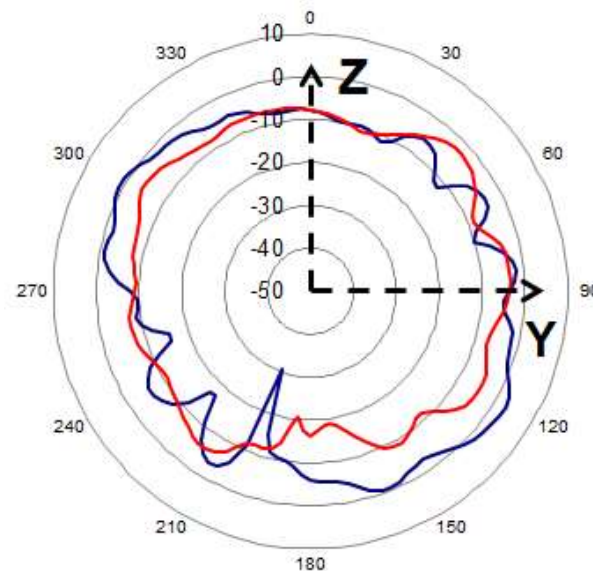
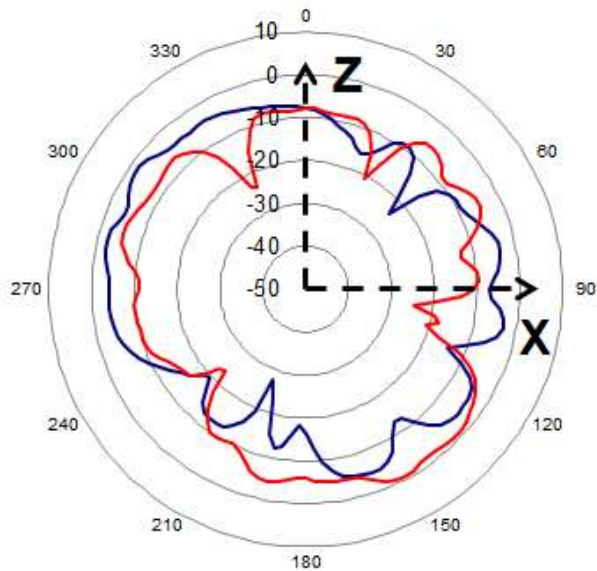
— V-Pol
— H-Pol



2.4G



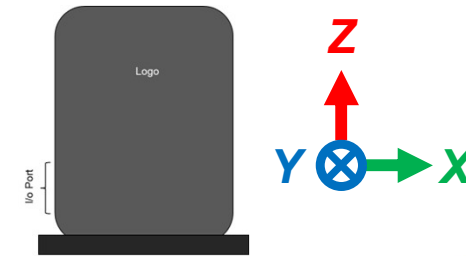
5G



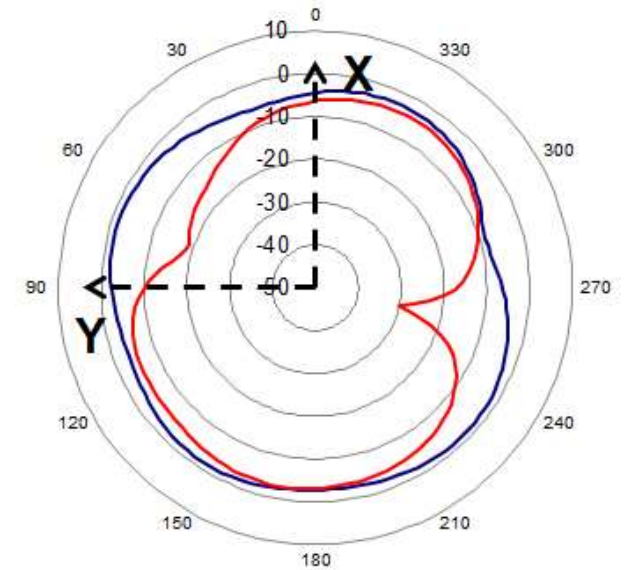
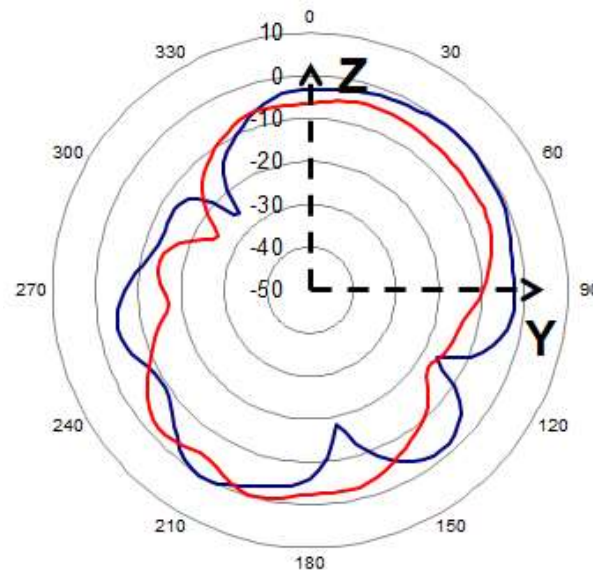
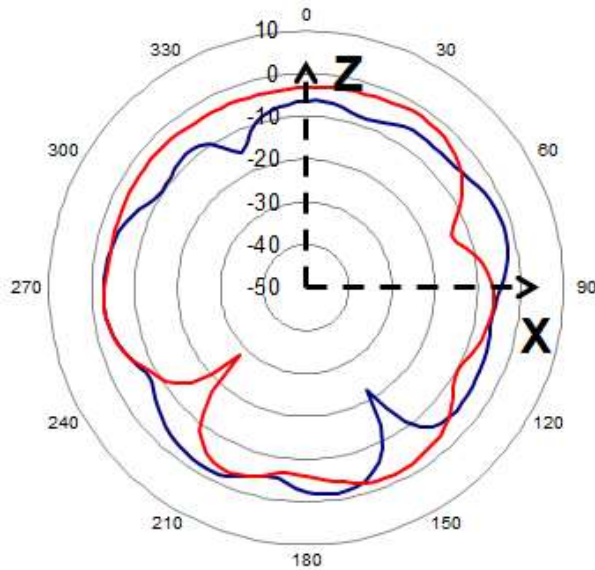
Radiation Pattern

● ANT3b Antenna

— V-Pol
— H-Pol



BT



5G

