Antenna Reports

Main Antenna vendor: Motorola
Test lab: Motorola internal lab (by GTS RayZone2800)
Antenna model name: Midframe
Issue date: 2024/01/03

Approved by: _Hu wei_

Antenna Summary Table

Check items	Information
Provided by lab	Motorola internal lab (GTS)
Manufacturer/ Brand name	Motorola
Manufacturer address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA
Model name (Part number)	Midframe
Test environment	Motorola Shanghai RD team Lab with GTS RayZone2800 chamber
Test software	MaxSign Libra
Antenna detail info.	ANT5: BT/WiFi2.4G / 5G / 6E antenna (2.4~2.5GHz, 5.15~7.125GHz), Loop type antenna. ANT7: BT/WiFi 2.4G / 5G / 6E antenna (2.4~2.5GHz, 5.15~7.125GHz), IFA antenna NFC Antenna: Loop antenna WPT Antenna: Loop antenna
Antenna gain test data	Included antenna frequency, gain pattern

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.

List of Test equipment

| Equipment	Calibrate date	Due date	Remark
GTS RayZone2800	October 23, 2022	October 22, 2025	Self-monitor monthly to ensure the variation within 0.5db during the cycle.
Keysight VNA 5071C	September 29, 2023	September 28, 2024	N/A

Antenna Test data:

| Antenna Type /Gian 2.4G	<2400MHz~2483.5MHz> <Ant5>: Loop Antenna with gain: -3.85dBi <Ant7>: IFA Antenna with gain: -2.24dBi
Antenna Type /Gian 5G	<5150MHz~5250MHz> <Ant5>: Loop Antenna with gain: -3.1dBi <Ant7>: IFA Antenna with gain: -3.01dBi <5250MHz~5350MHz> <Ant5>: Loop Antenna with gain: -2.6dBi <Ant7>: IFA Antenna with gain: -2.87dBi <5470MHz~5725MHz> <Ant5>: Loop Antenna with gain:-2.7dBi <Ant7>: IFA Antenna with gain: -3.25dBi <5725MHz~5850MHz> <Ant5>: Loop Antenna with gain: -2dBi <Ant7>: IFA Antenna with gain: -2.5dBi
Antenna Type /Gian 6E	<5925MHz~6425MHz> <Ant5>: Loop Antenna with gain: -3.7dBi <Ant7>: IFA Antenna with gain: -3.9dBi <6425MHz~6525MHz> <Ant5>: Loop Antenna with gain: -5.5dBi <Ant7>: IFA Antenna with gain: -4.7dBi <6525MHz~6875MHz> <Ant5>: Loop Antenna with gain: -6.6dBi <Ant7>: IFA Antenna with gain: -5.1dBi <6875MHz~7125MHz> <Ant5>: Loop Antenna with gain: -5.3dBi <Ant7>: IFA Antenna with gain: -6.21dBi

ANT5 Gain Plot

(Rear view– Front view)
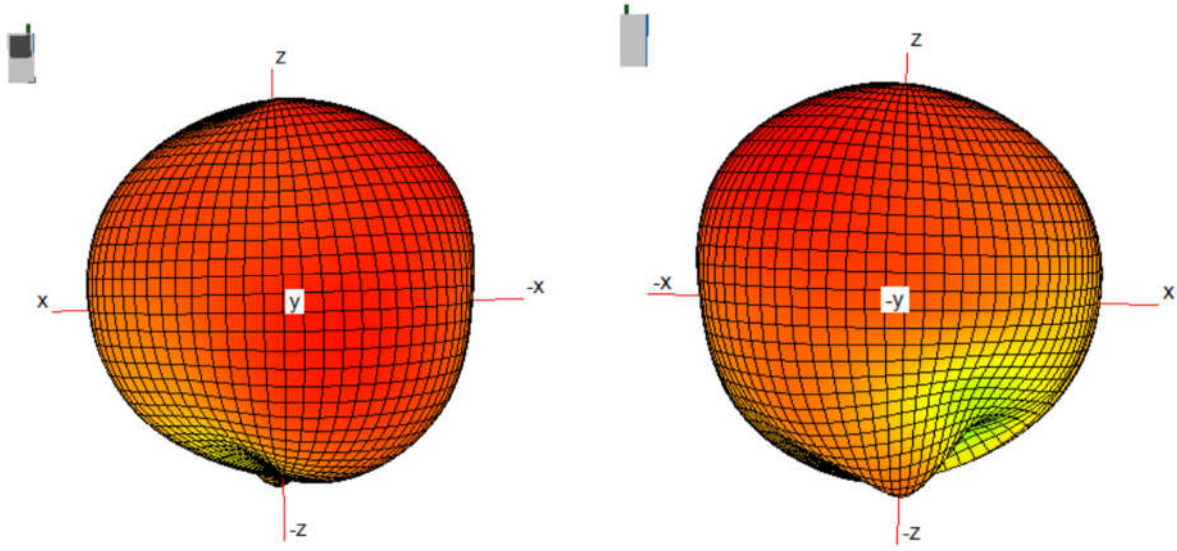
WIFI 2.4G (2450 MHz)

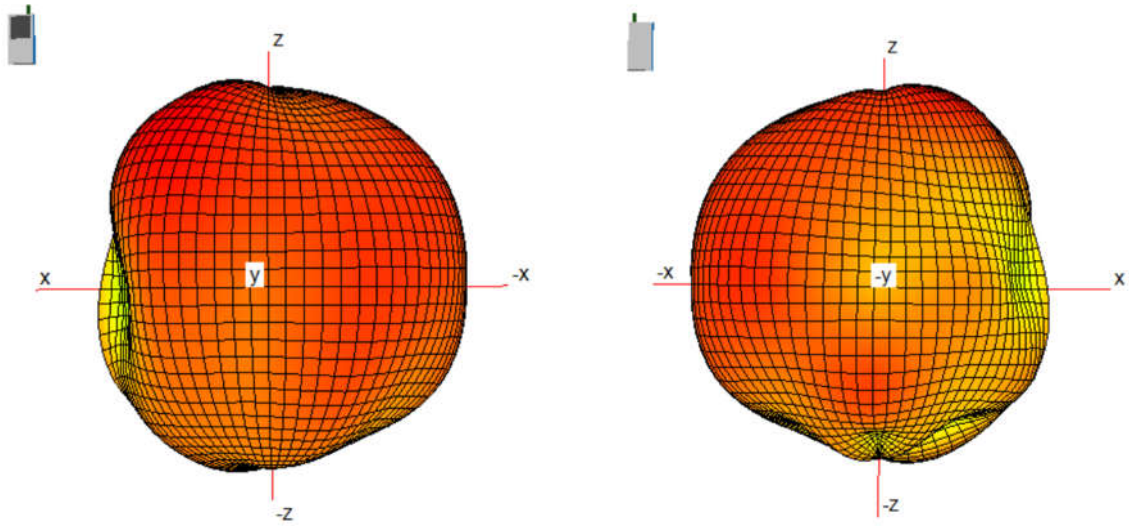## WIFI 5G (5200 MHz)
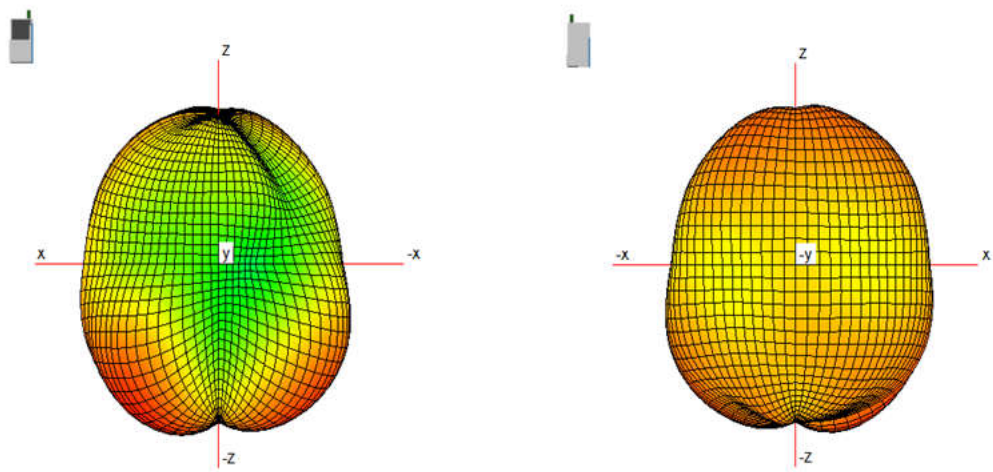
WIFI 5G (5300 MHz)
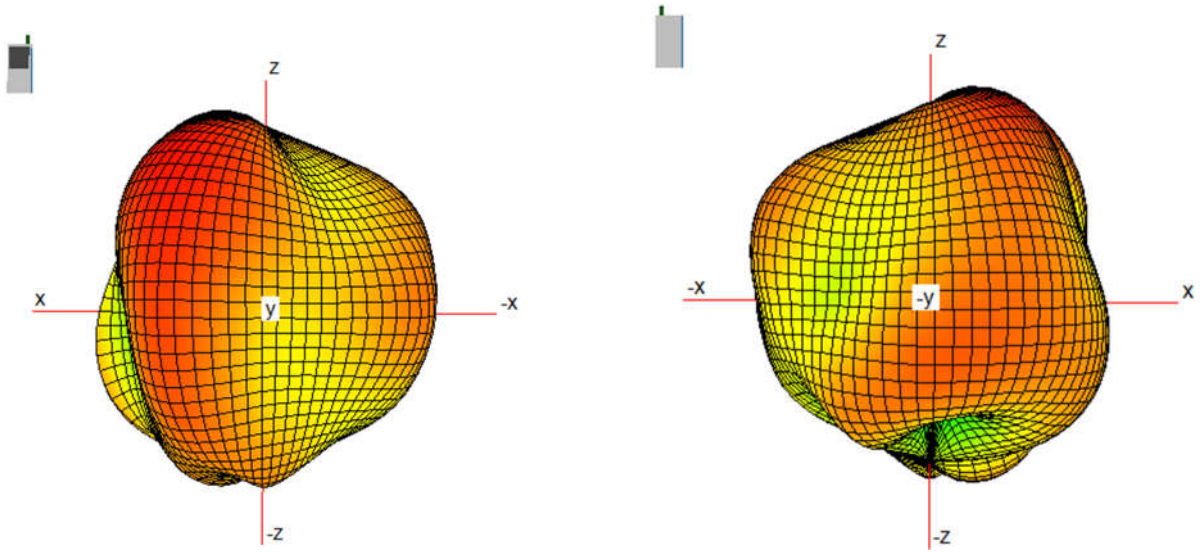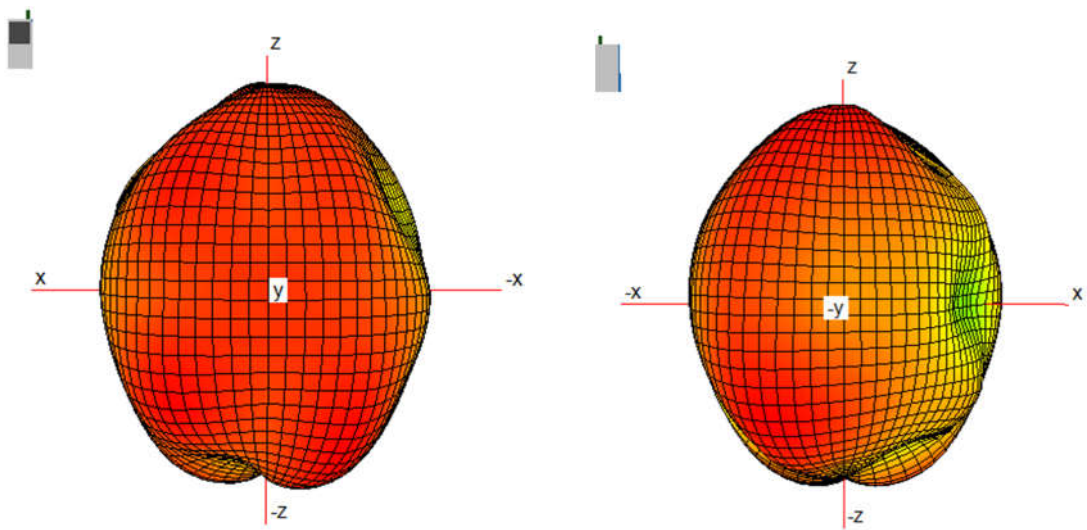

WIFI 5G (5500 MHz)
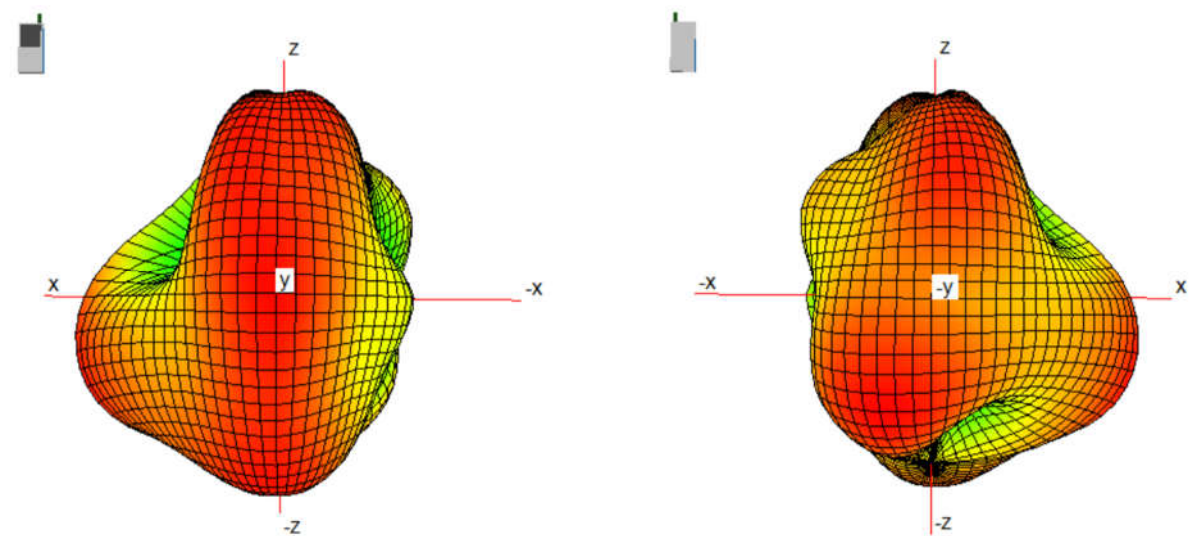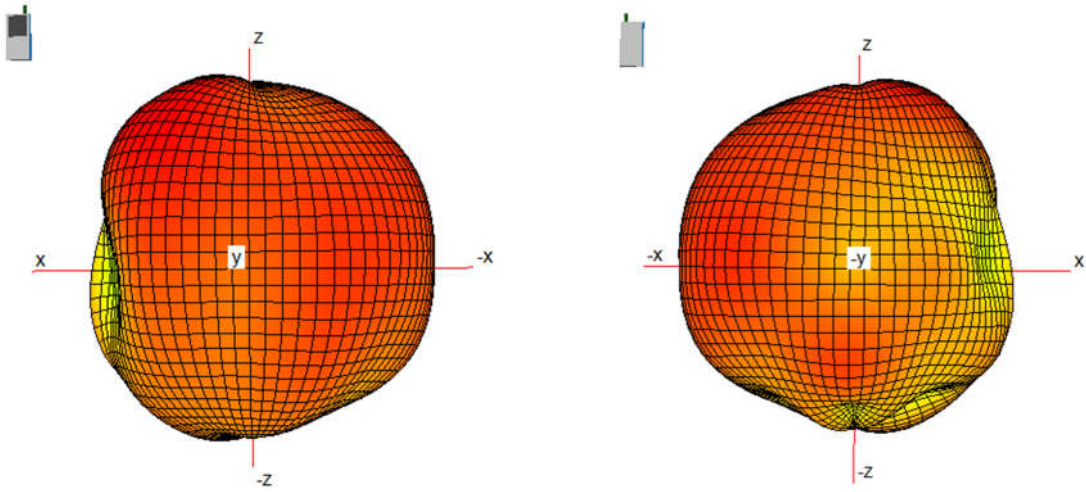
WIFI 5G (5800 MHz)
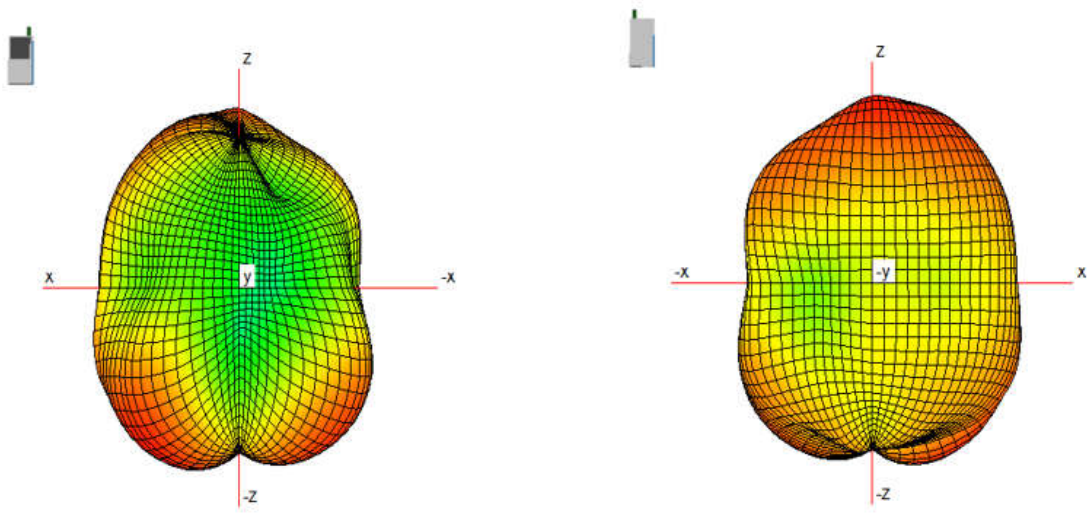
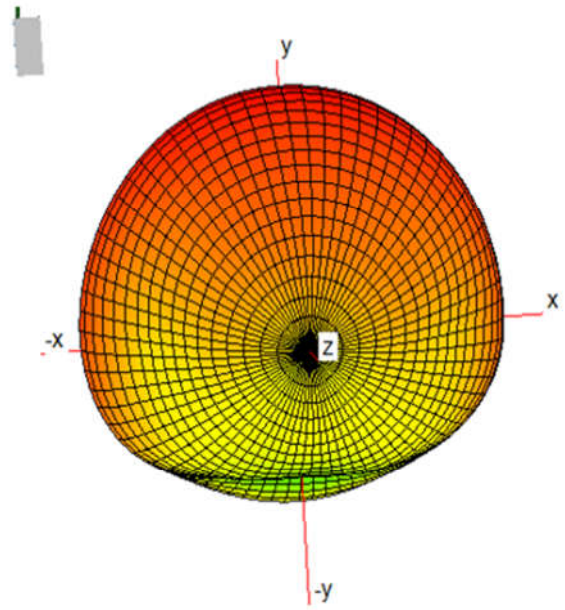# WIFI 6E (6100 MHz)
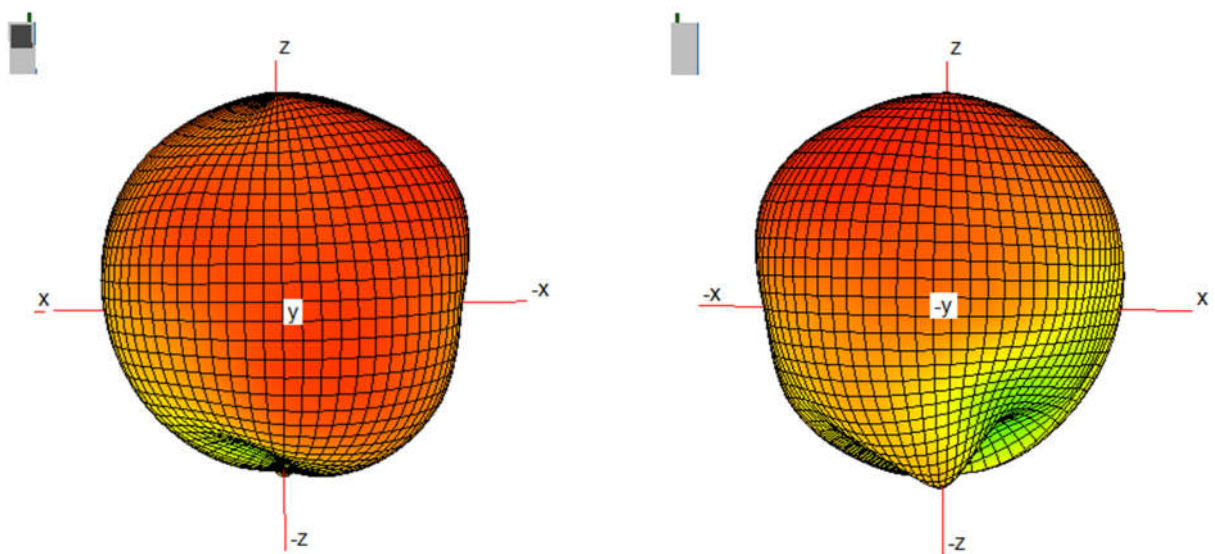
WIFI 6E (6500 MHz)
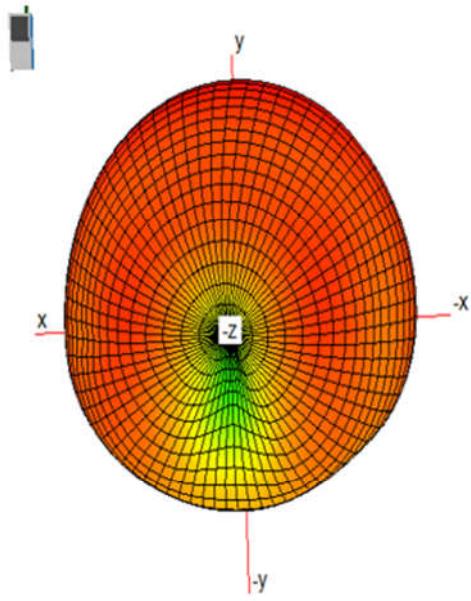

WIFI 6E (6700 MHz)

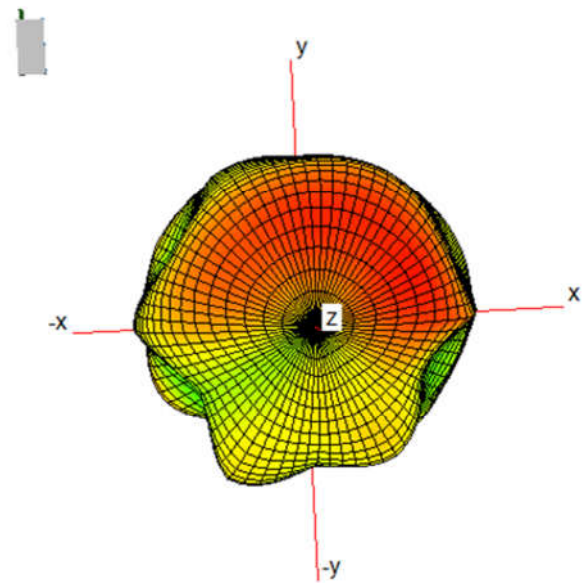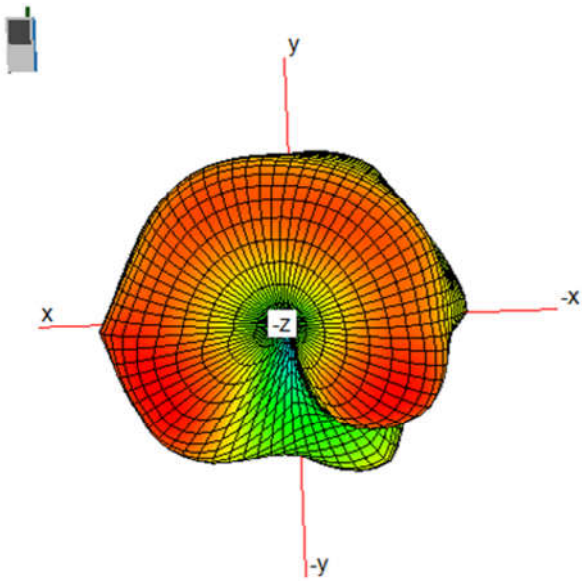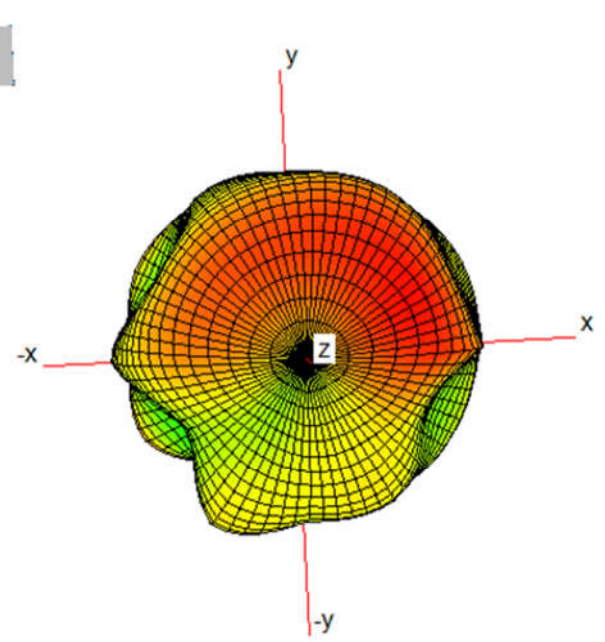WIFI 6E (7000 MHz)
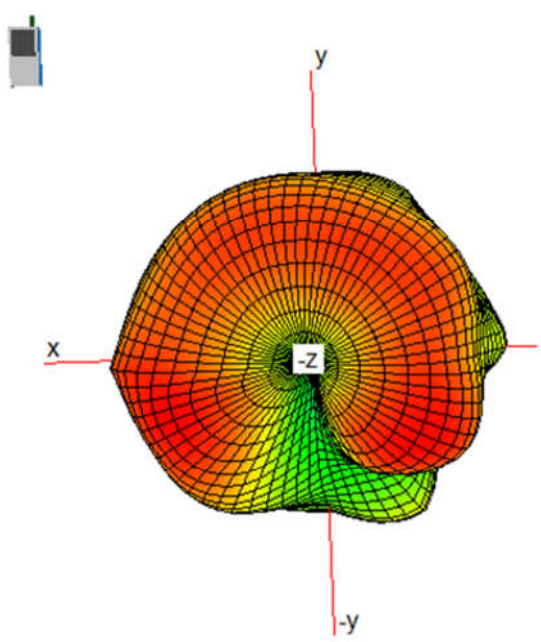

ANT7 Gain Plot

(Rear view– Front view)
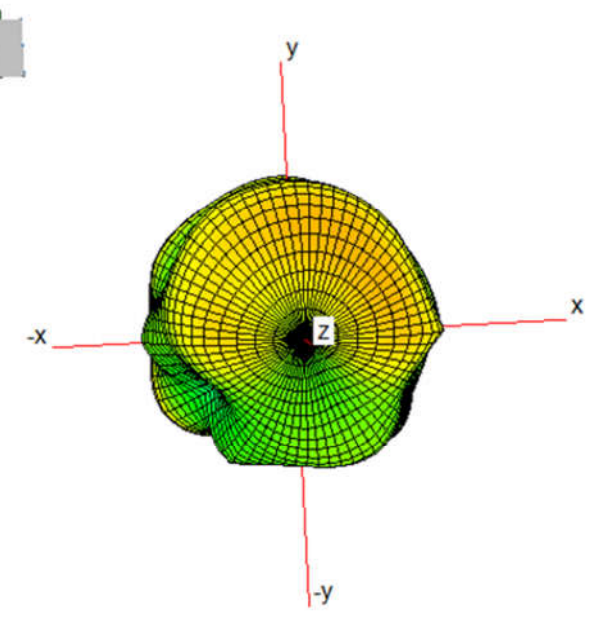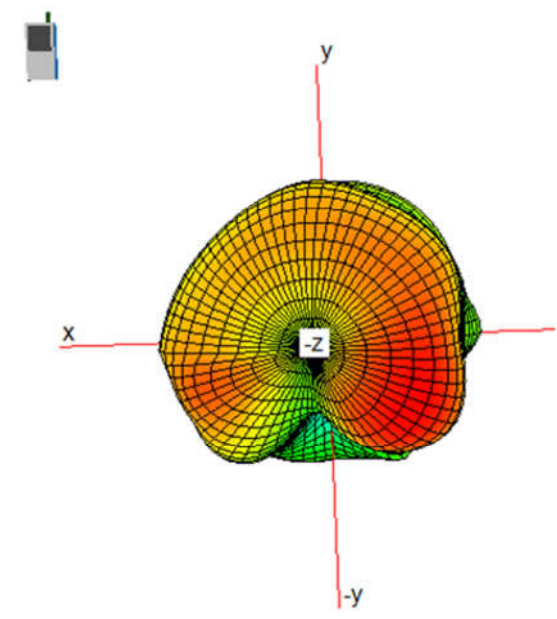
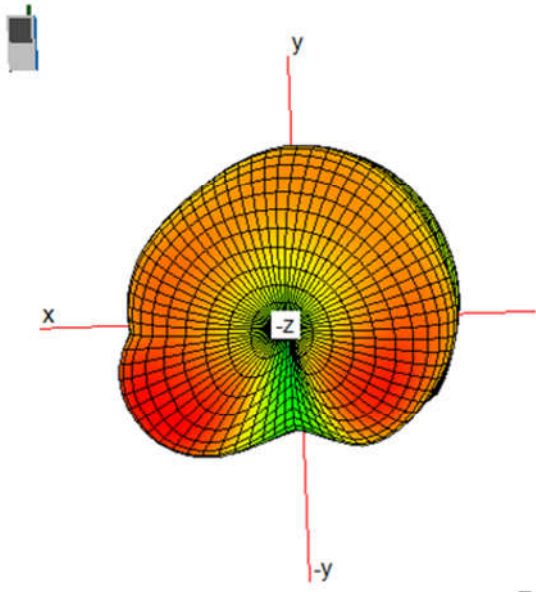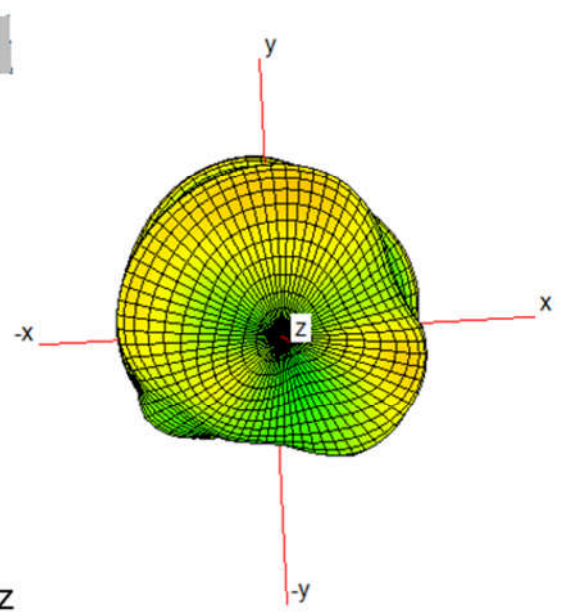WIFI 2.4G (2450 MHz)

2450Mhz

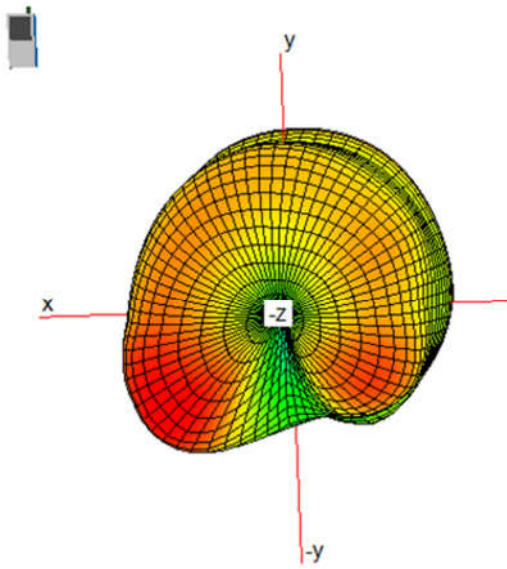WIFI 5G (5200 MHz)

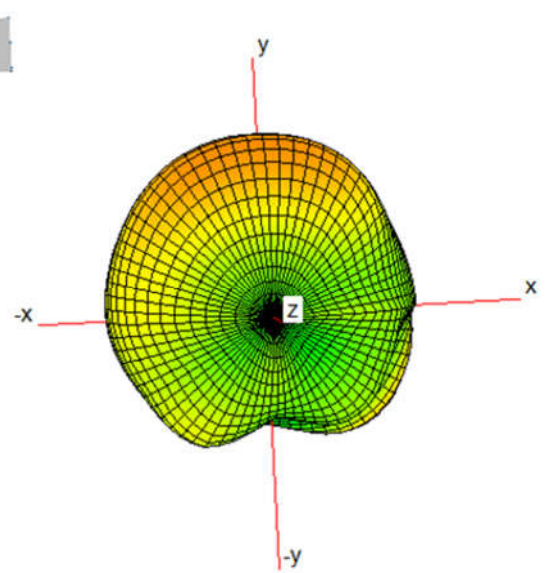

5200Mhz

WIFI 5G (5300 MHz)
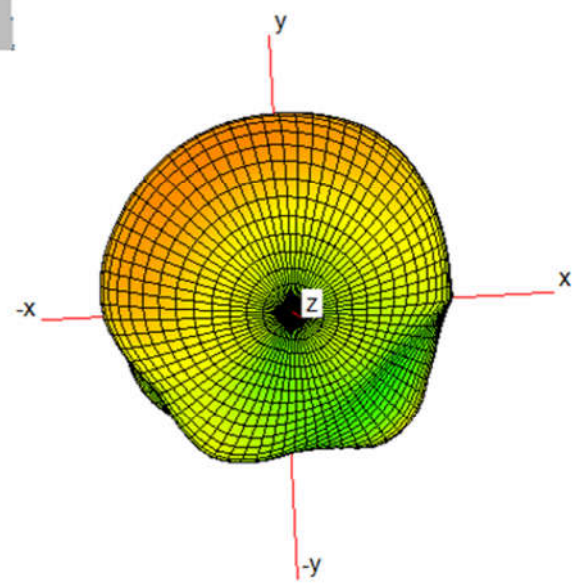
5300Mhz
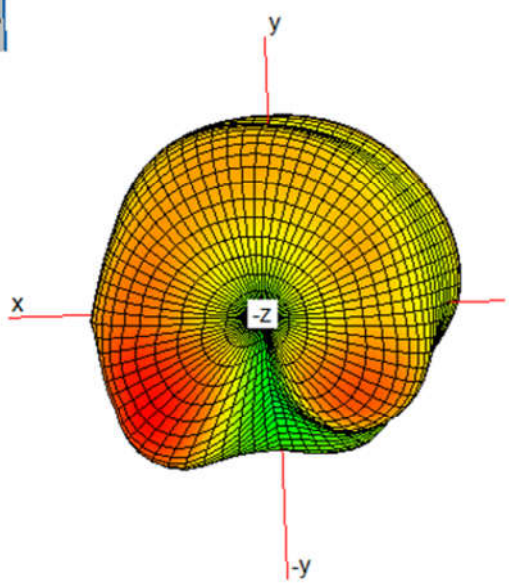
WIFI 5G (5500 MHz)

5500Mhz

WIFI 5G (5800 MHz)
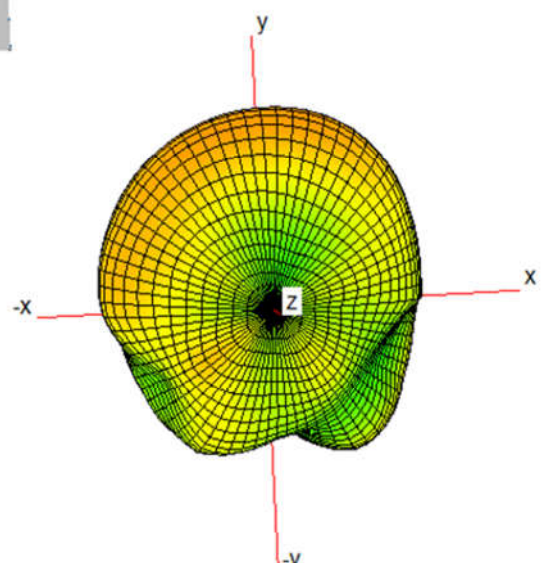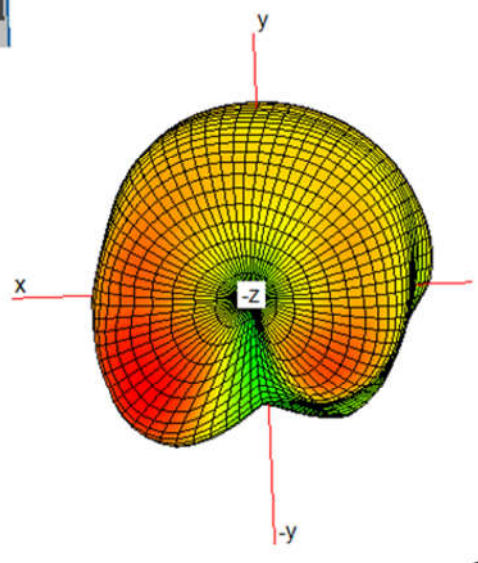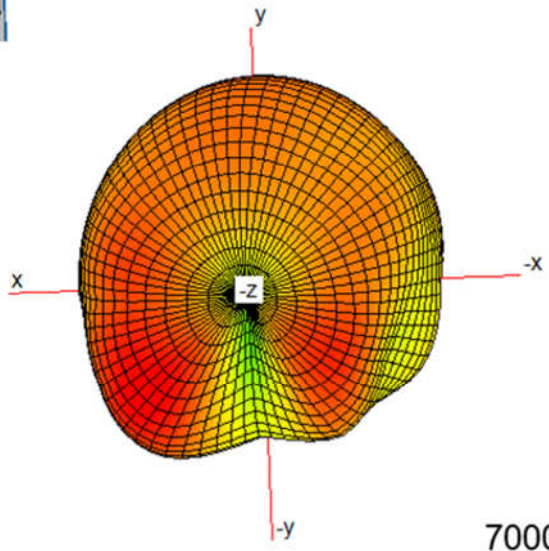
5800Mhz

WIFI 6E (6100 MHz)

6100Mhz

WIFI 6E (6500 MHz)

6500Mhz

WIFI 6E (6700 MHz)

6700Mhz

WIFI 6E (7000 MHz)

7000Mhz