
Antenna Reports

Main Antenna vendor: SHen ZHen Deman Electronics Co.,Ltd.

Address: Floor 5, Building C, No.28, Tangqing West Road, Shitanpu, Tangxia Town,
Dongguan City, Guangdong Province

Antenna gain and radiation pattern measured in SATIMO anechoic chamber.

Antenna model name: T613P

Issue date: 2024/2/26

Test engineer: Peng Wang

王鹏

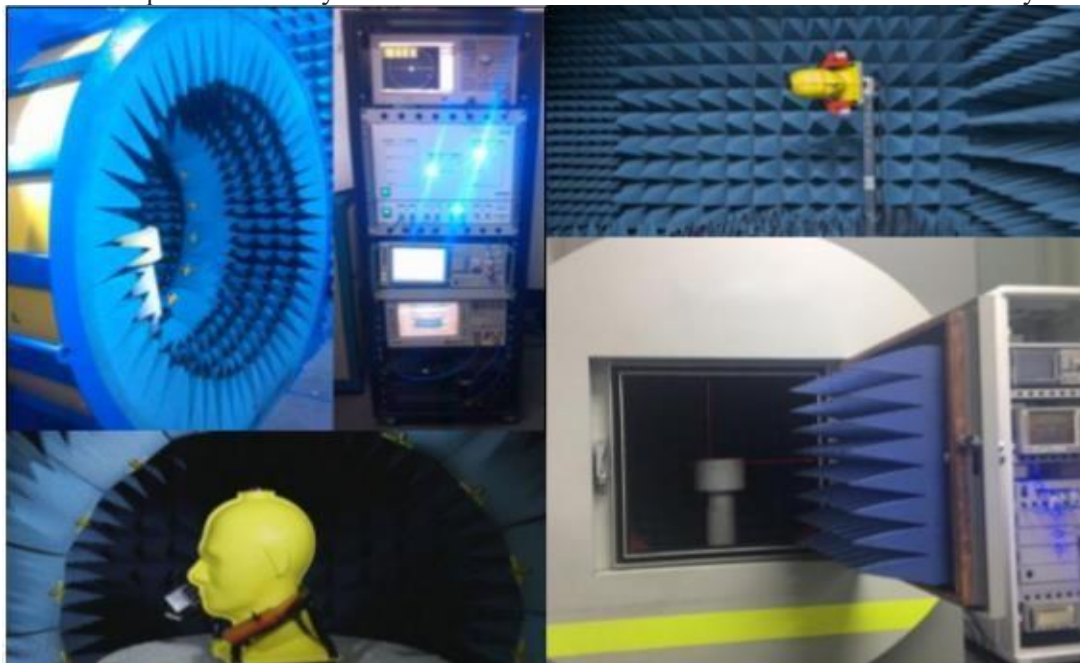
Test Equipment list

Description	Manufacturer	Model	Cal Date
Vector Network Analyzer	Agilent Technologies	E5071B	2023.11.25
Anechoic Chamber	SATIMO	SG16	2023.11.25

1、Test system introduction

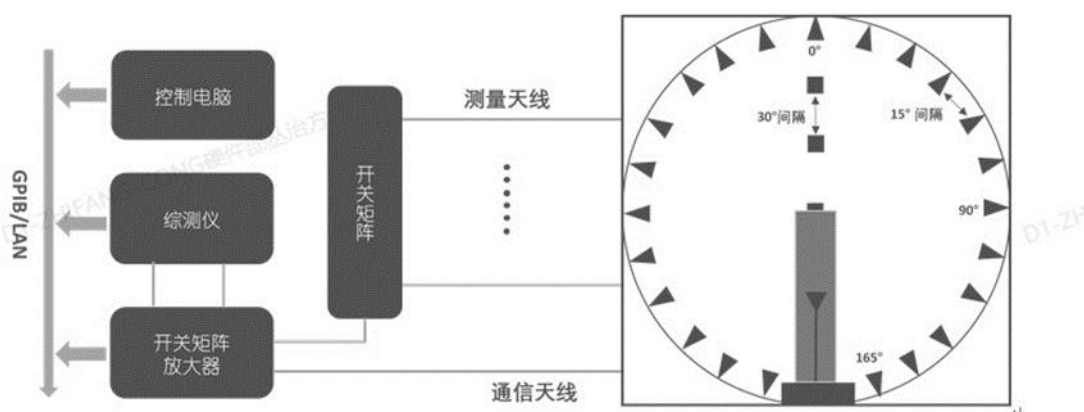
1.1 Anechoic chamber

Our company has a number of anechoic chamber for OTA test. It is ranging from 400 MHz to 8.5 GHz, which can provide passive test and active test, including OTA overall 2G, 3G, 4G, 5G FR test, WiFi multi-mode test, GPS active test, Bluetooth active test. The test system can provide antenna gain, efficiency, radiation pattern, upper and lower hemisphere efficiency values and mutual disturbance correlation coefficient analysis.

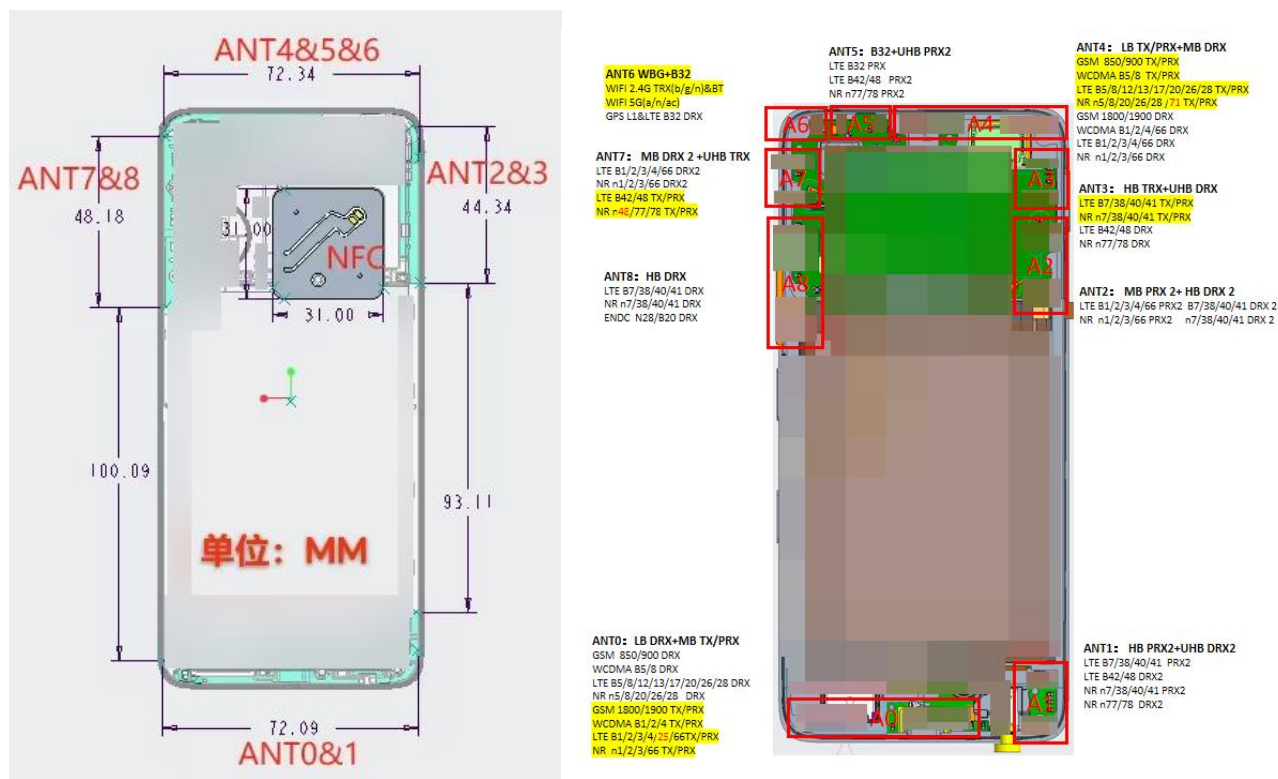


1.2 Test system Architecture

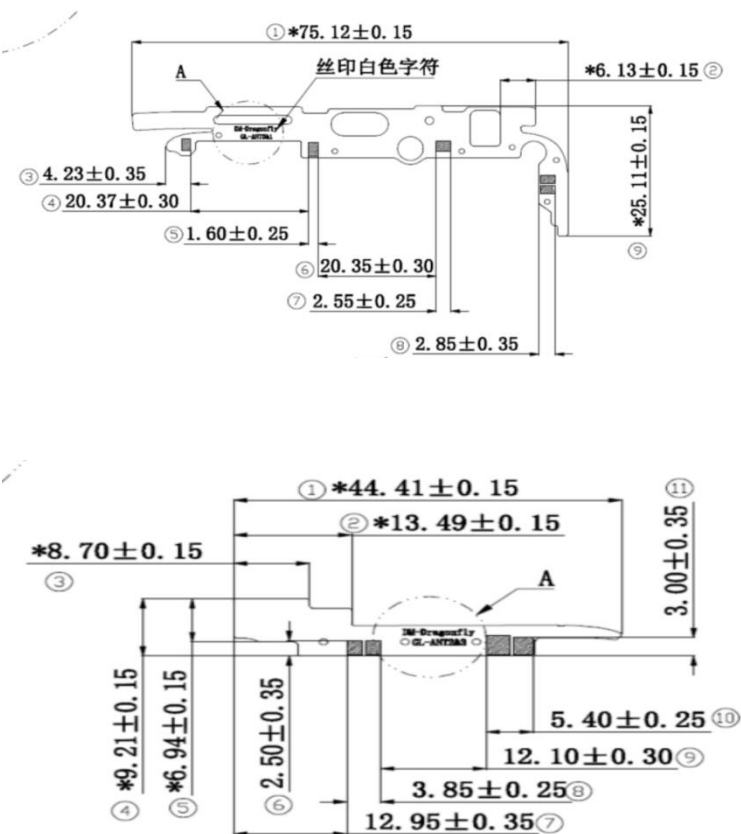
The figure above shows the connection and control process between the anechoic chamber of our company and the testing system and computer. The testing system has the characteristics of accurate, fast and simple testing. The operation interface is simple and humanized.



2、Antenna Location



3、Antenna Pattern



4、Antenna Peak Gain

ANT0

Antenna model name: FPC

Antenna type: IFA

GSM BAND	Peak Gain(dBi)
GSM 1800	-0.36
GSM 1900	-0.2

WCDMA BAND	Peak Gain(dBi)
WCDMA B1	-0.2
WCDMA B2	-0.2
WCDMA B4	-0.2

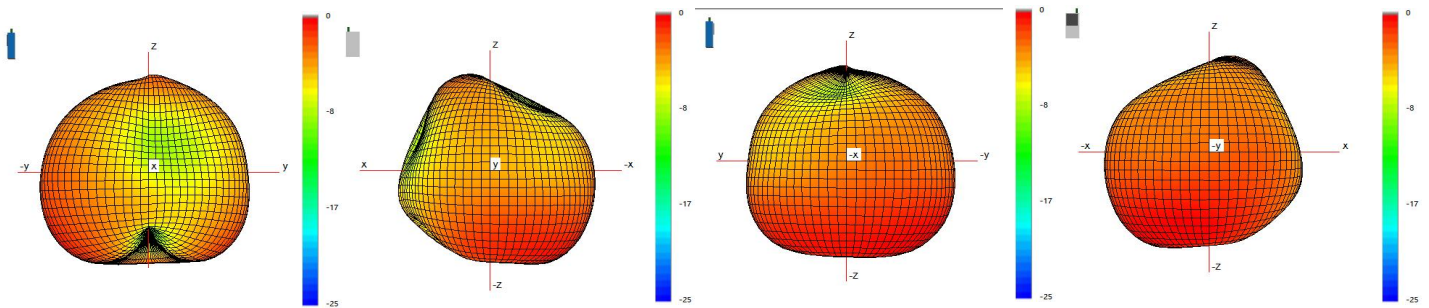
LTE BAND	Peak Gain(dBi)
LTE B1	-0.2
LTE B2	-0.2
LTE B3	-0.36
LTE B4	-0.2
LTE B25	-0.2
LTE B66	-0.2

NR BAND	Peak Gain(dBi)
NR n1	-0.2
NR n2	-0.2
NR n3	-0.36
NR n66	-0.2

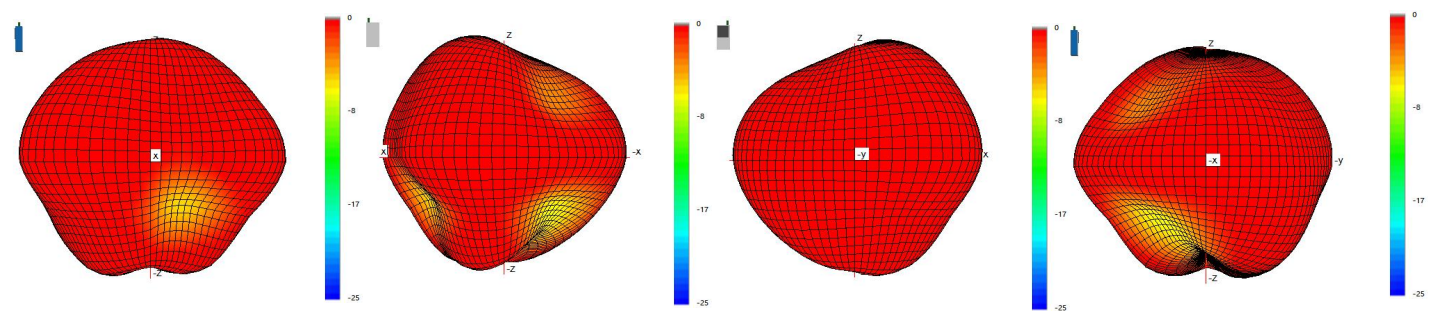
Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document

(Right view – Rear view – Left view – Front view)

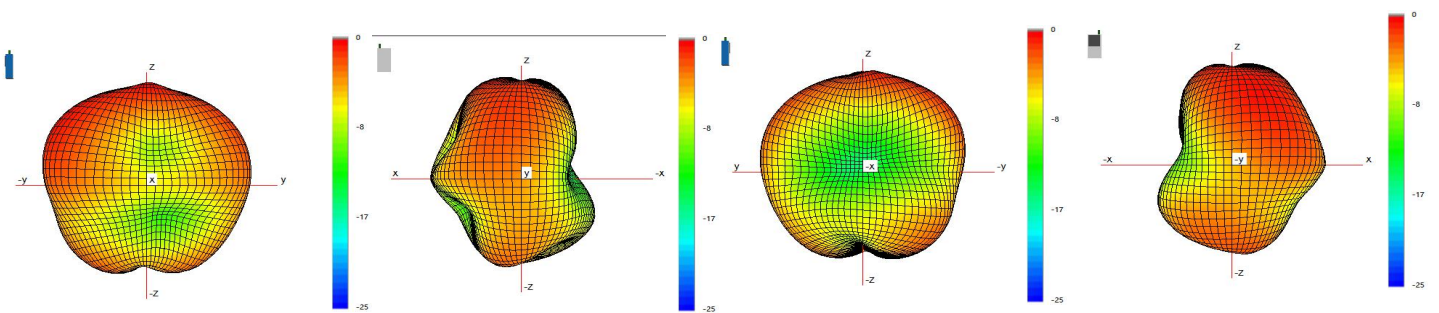
GSM 1800/LTE B3/NR N3



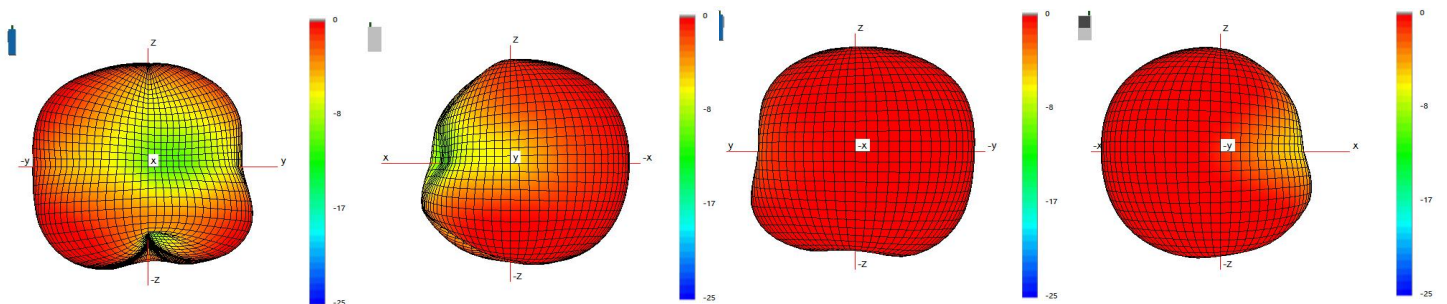
GSM 1900/LTE B2/WCDMA B2/NR N2



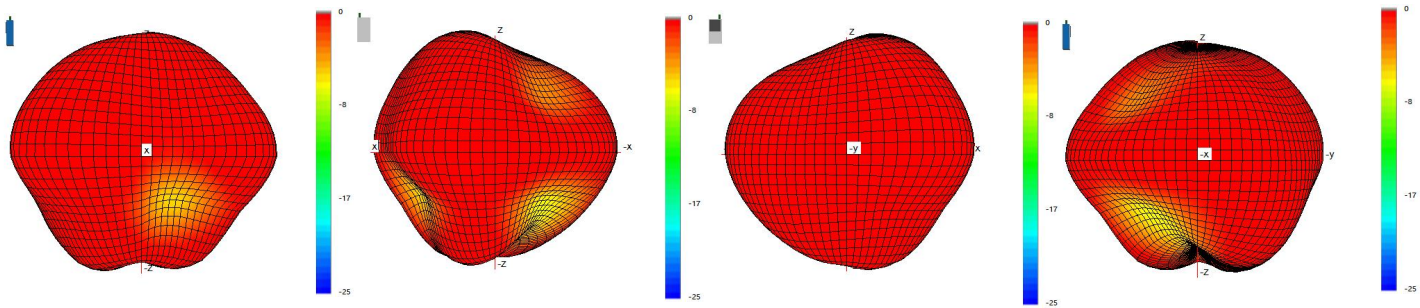
NR N1/LTE B1/WCDMA B1



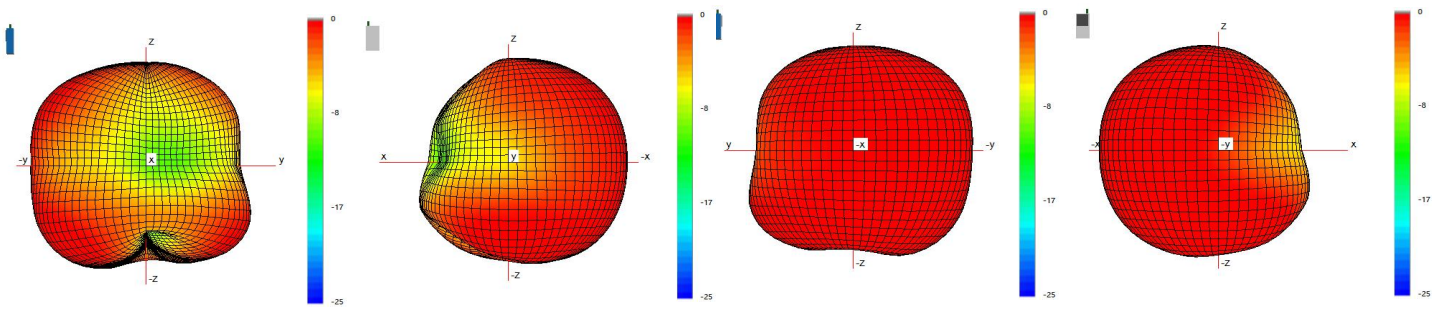
LTE B4/WCDMA B4



LTE B25



LTEB26/NR N26



ANT3

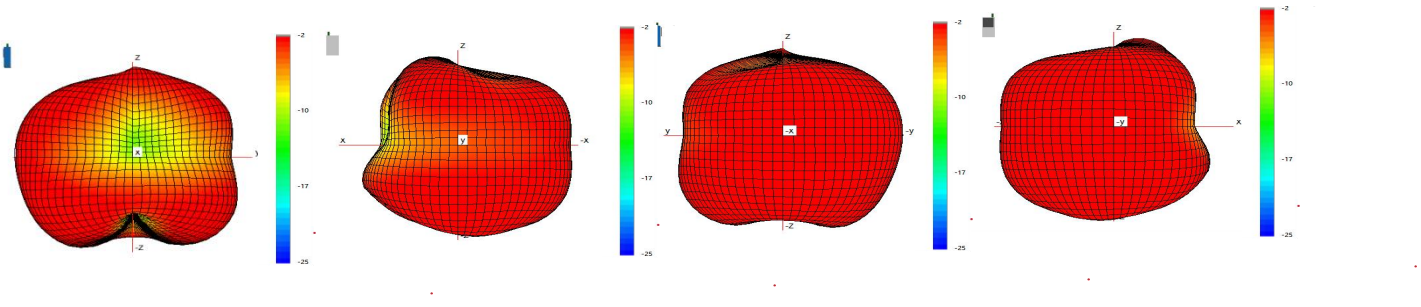
Antenna model name: FPC

Antenna type: IFA

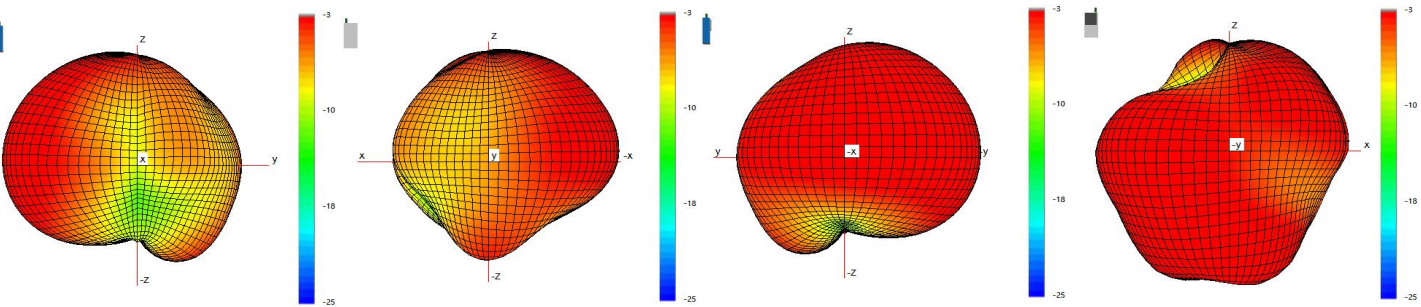
LTE BAND	Peak Gain(dBi)
LTE B7	-2.5
LTE B38	-2.5
LTE B40	-3.8
LTE B41	-2.5

NR BAND	Peak Gain(dBi)
NR N7	-2.5
NR N38	-2.5
NR N40	-3.8
NR N41	-2.5

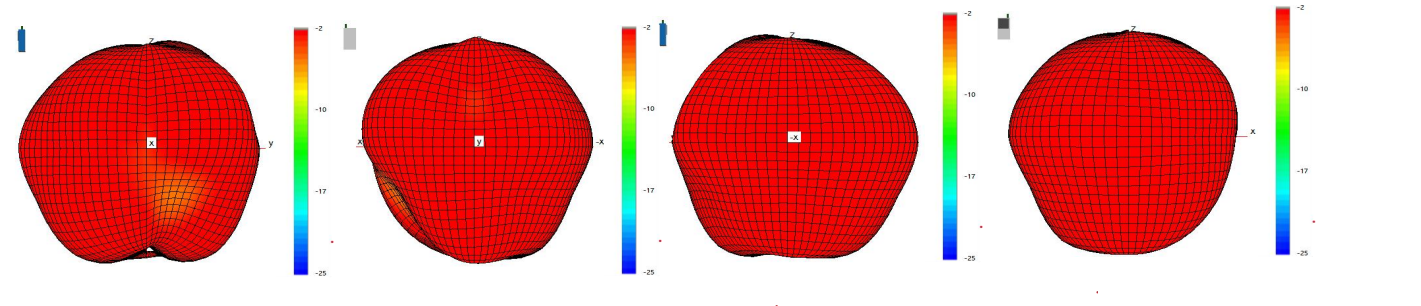
NR N7/LTE B7



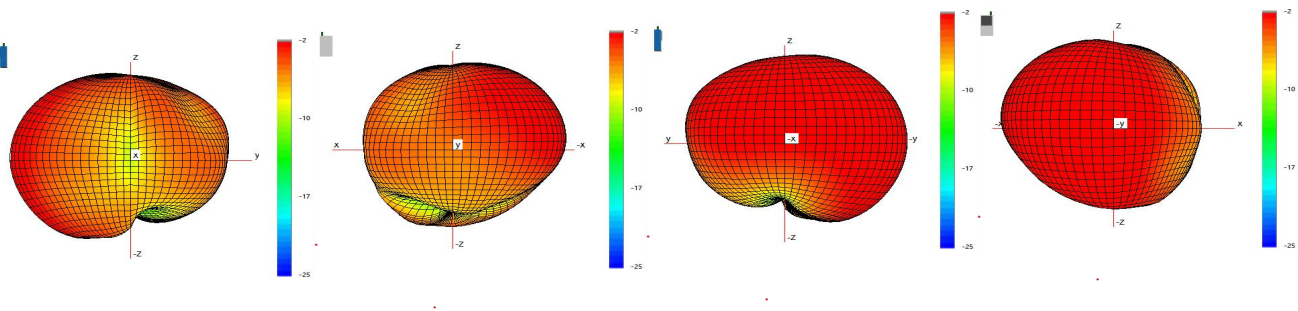
NR N38/LTE B38



NR N40/LTE B40



NR N41/LTE B41



ANT4

Antenna model name: FPC

Antenna type: IFA

GSM BAND	Peak Gain(dBi)
GSM 850	-5
GSM 900	-3.6

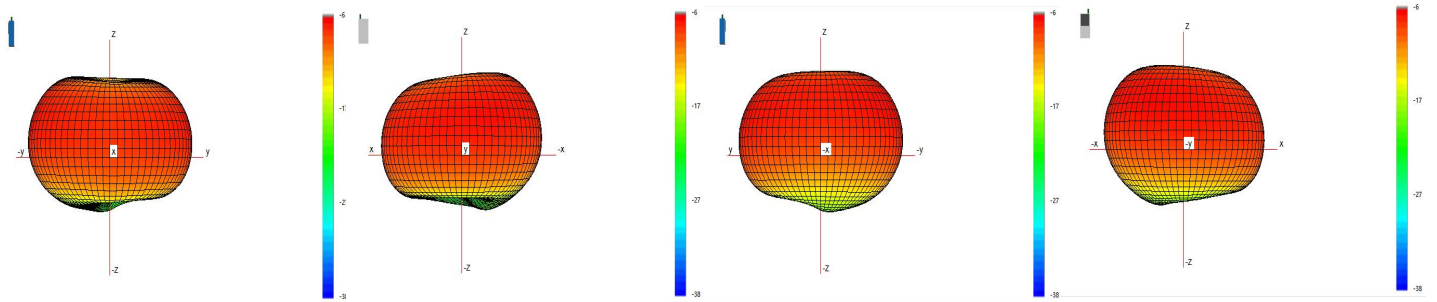
WCDMA BAND	Peak Gain(dBi)
WCDMA B5	-5
WCDMA B8	-3.6

LTE BAND	Peak Gain(dBi)
LTE B5	-5
LTE B8	-3.6
LTE B13	-5
LTE B17	-5
LTE B20	-5
LTE B26	-5
LTE B28	-5

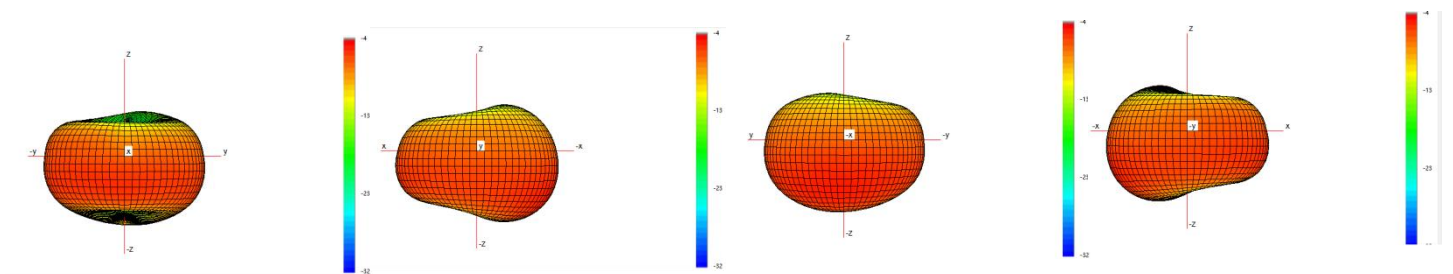
NR BAND	Peak Gain(dBi)
NR N5	-5
NR N8	-3.6
NR N20	-5
NR N26	-5
NR N28	-5
NR N71	-6.3

Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document
(Right view – Rear view – Left view – Front view)

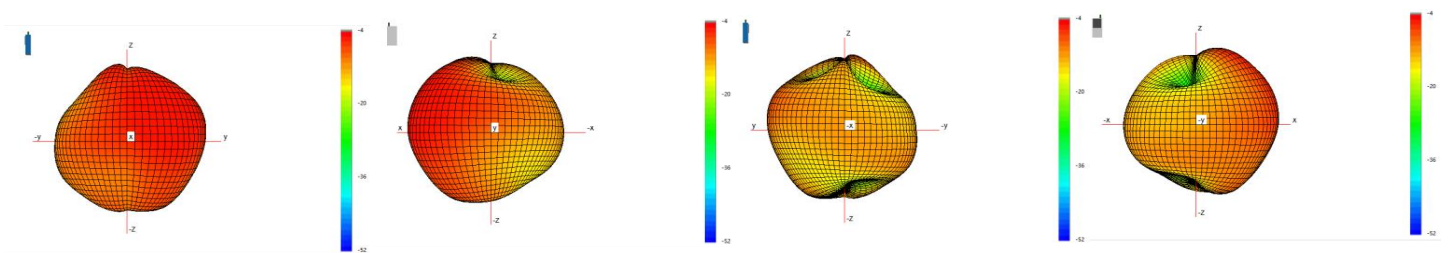
NR N5/LTE B5/WCDMA B5/GSM 850



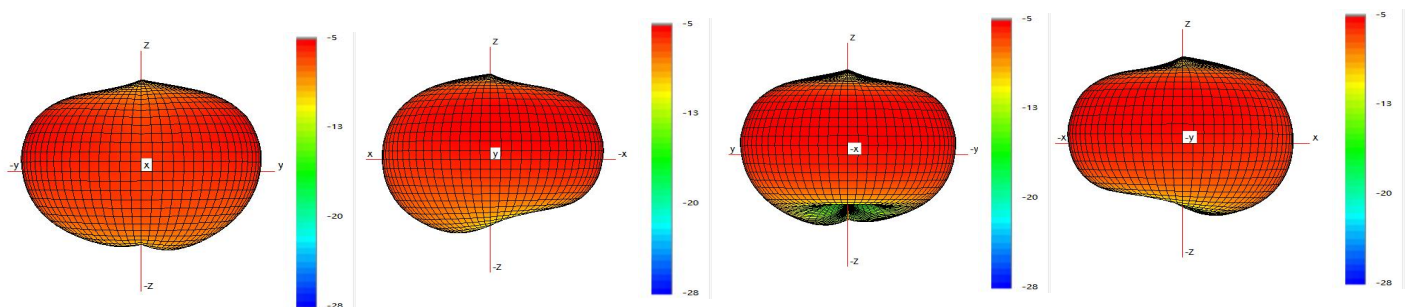
NR N8/LTE B8/WCDMA B8/GSM 900



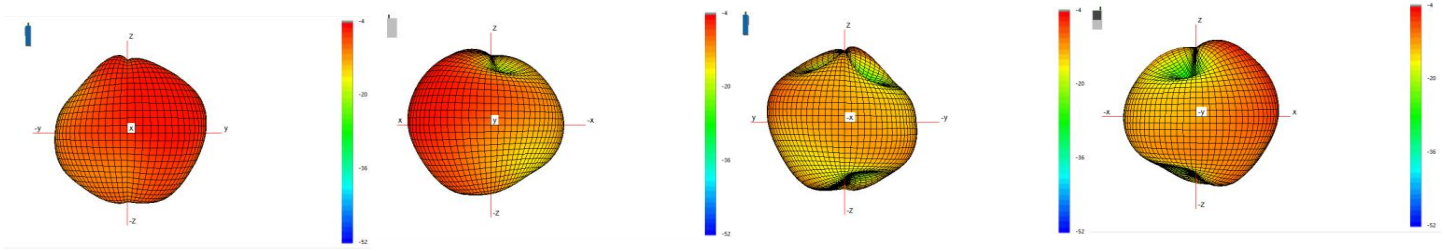
LTE B13



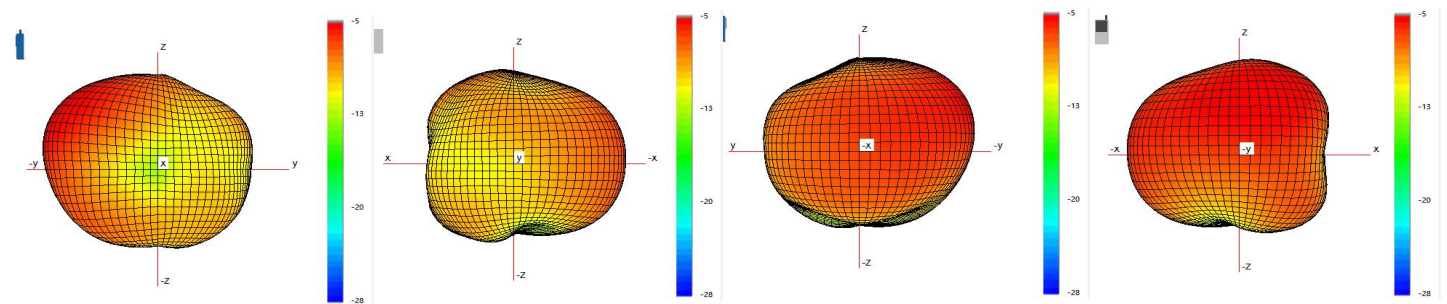
LTE B17



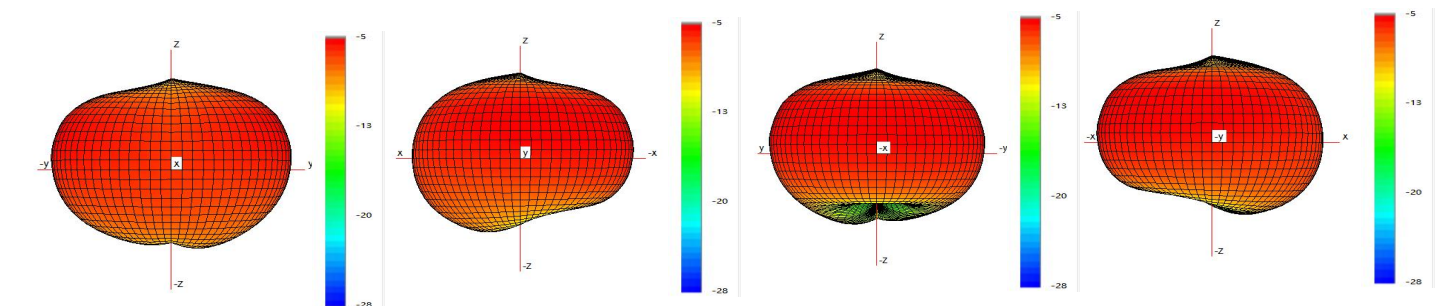
NR N20/LTE B20



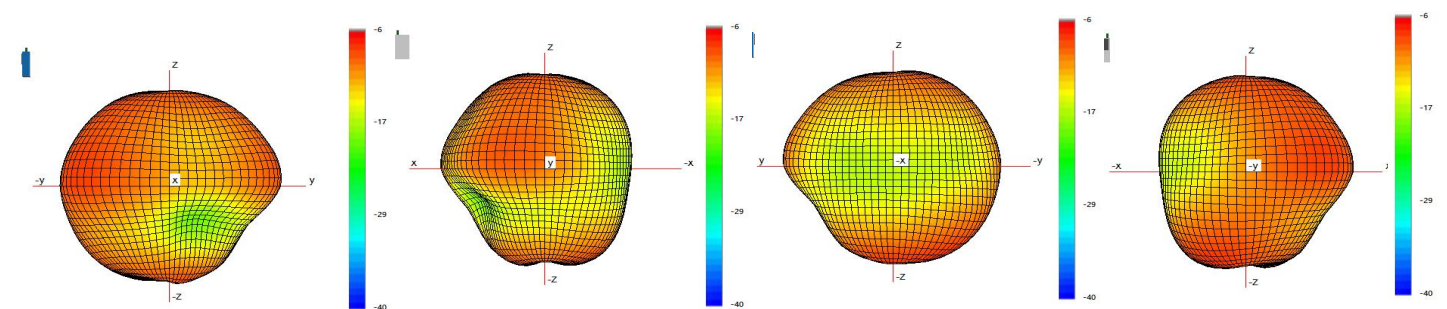
NR N26/B26



NR N28/B28



NR N71



ANT6

Antenna model name: FPC

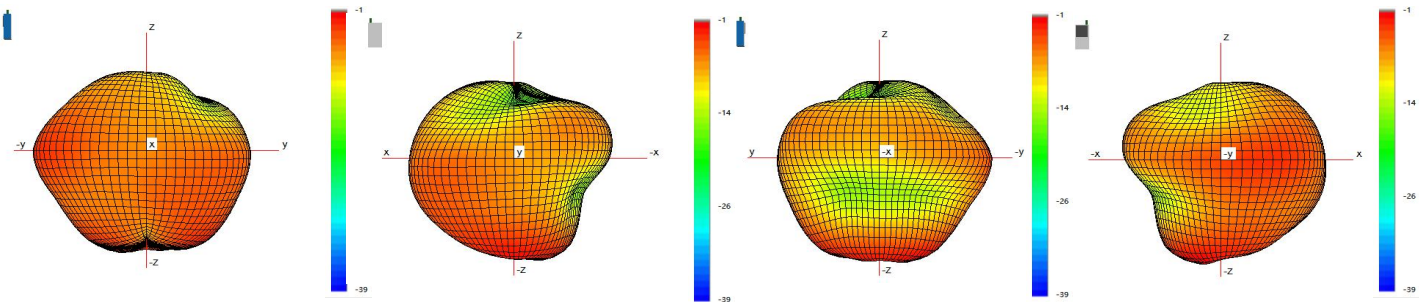
Antenna type: IFA

BT/WLAN Peak Gain (dBi)			
2400~2483.5MHz	-2.3	5470~5725MHz	-2
5150~5250MHz	-1	5725~5850MHz	-3
5250~5350MHz	-1	GPS	-0.5

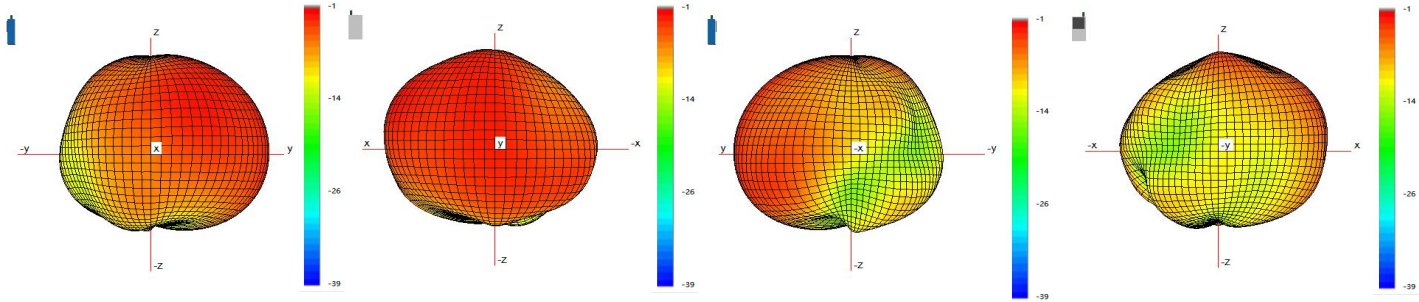
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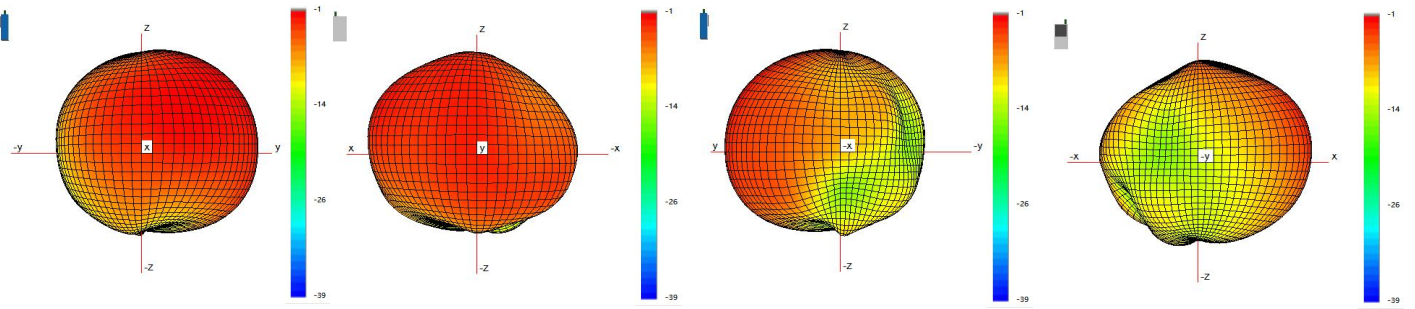
WIFI 2.4G (2450 MHz)



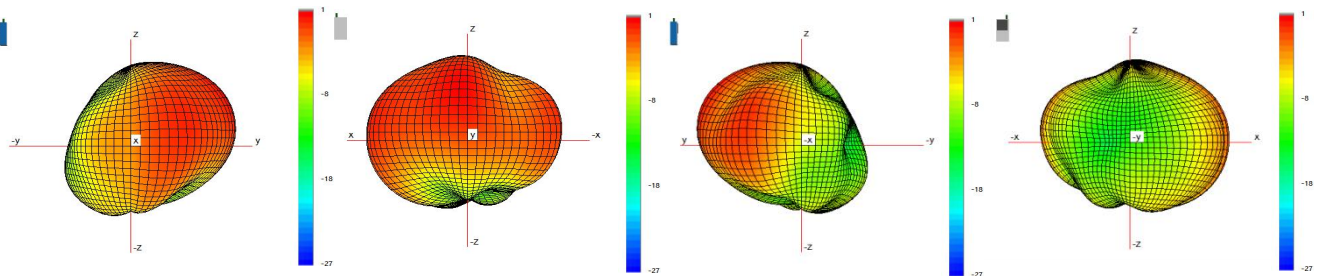
WIFI 5G (5200 MHz)



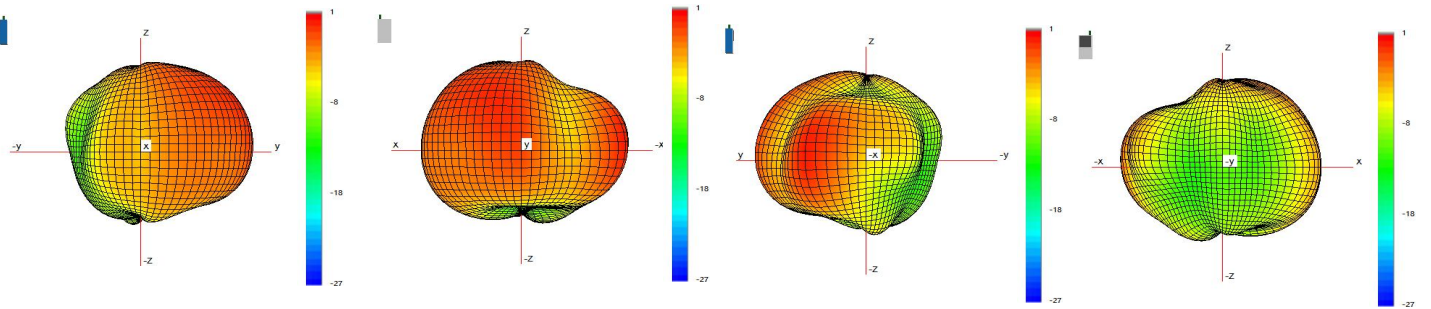
WIFI 5G (5300 MHz)



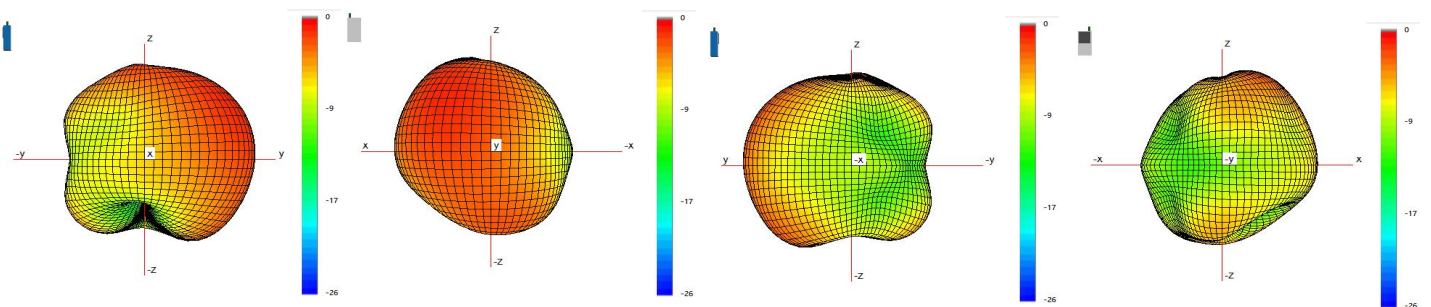
WIFI 5G (5500 MHz)



WIFI 5G (5800 MHz)



GPS



ANT7

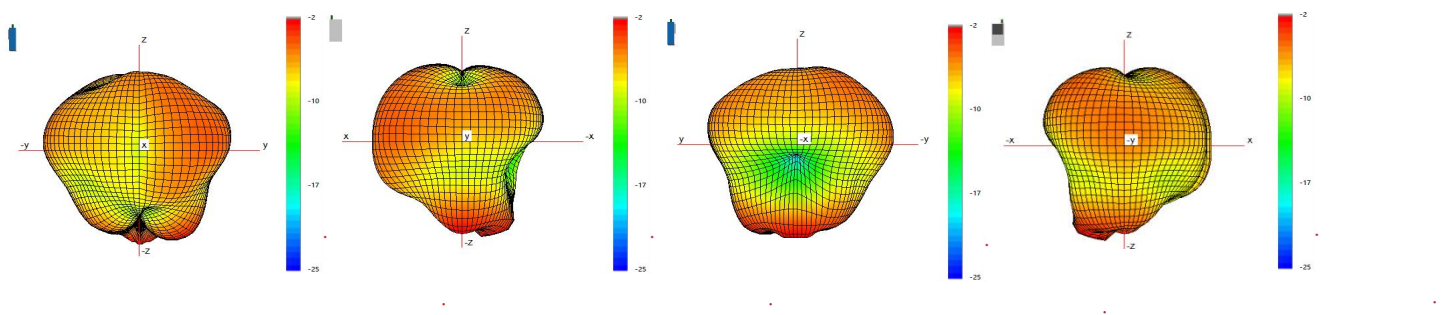
Antenna model name: FPC

Antenna type: IFA

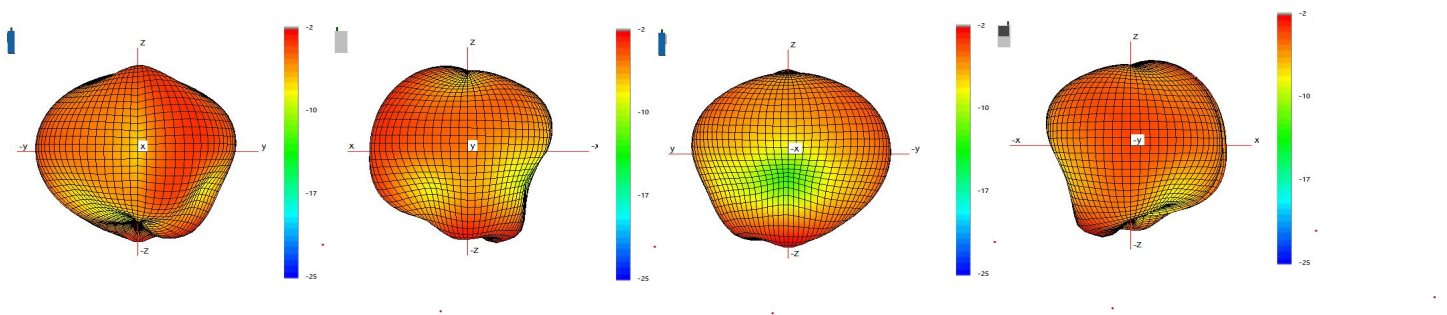
LTE BAND	Peak Gain(dBi)
LTE B42	-2.5
LTE B48	-2.6

NR BAND	Peak Gain(dBi)
NR n48	-2.6
NR n77	-2.5
NR n78	-2.7

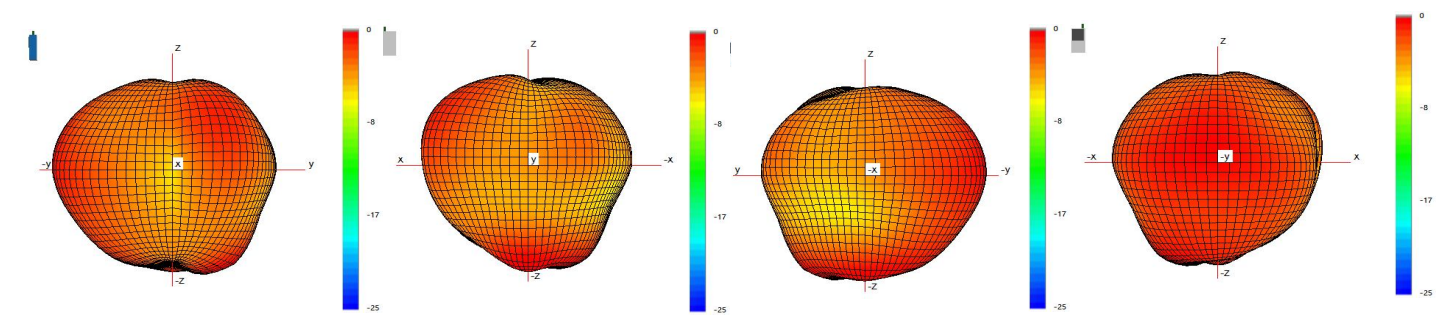
LTE B42



NR N48/LTE B48



NR N77



NR N78

