

规格承认书
SPECIFICATION FOR APPROVAL

客户名称:
CUSTOMER:

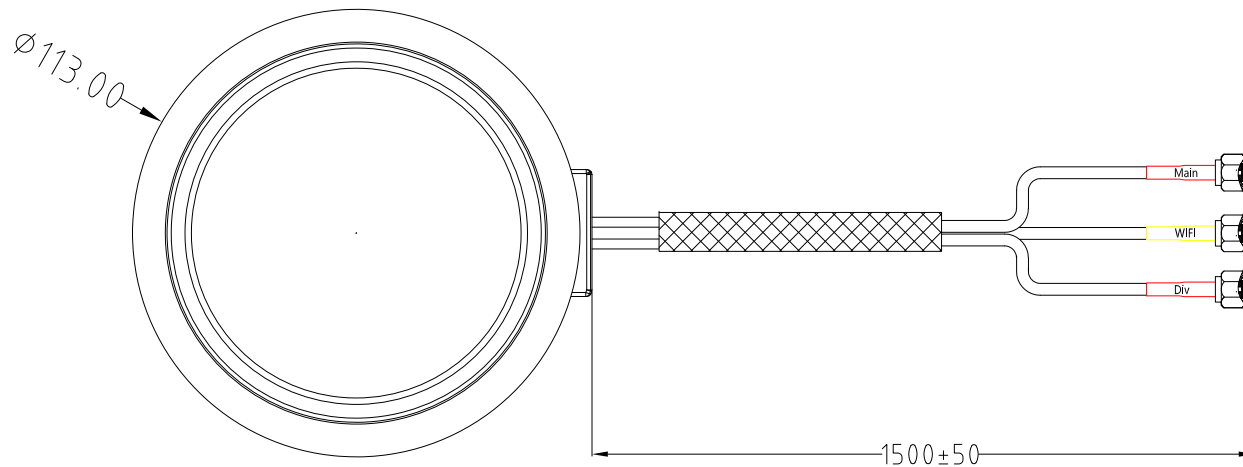
客户料号:
CUSTOMER NO:

品 名:
PART NAME:M113 MIMO Antennas

RS 料号
RS NO: M113.M0.3.334

SUPPLIER SIGNATURE(供方确认)		
APPROVAL	CHECK	DESIGN
king	Frank	HZH

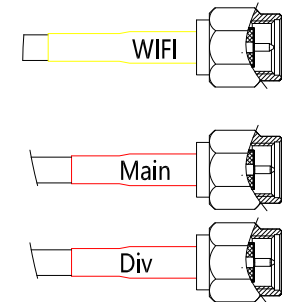
CUSTOMER APPROVED BY(客户确认)		
APPROVAL	CHIEF	SUPERVISOR



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Mag mount horizontal thrust 7 kg. remained stationary without sliding
Mag mount vertical pull strenght 10 kg

THIRD ANGLE PROJECTION 	DRAWN BY	Li	MATERIAL:		PART NO:	M113.M0.3.334
	CHECKED BY		FINISH:		TITLE:	4G/5G WIFI 3-in-1 Antenna
Tolerance . X ±0.1 . XX ±0.05 . x ±1°	APPROVED BY	King	UNIT:	mm	 RUNSHUN Dongguan RunShun /www.rsantenna.com	
	DATE:	24.12.30	SCALE:1/1	REV 3.0		



SMA Connector

4G/5G RED Shrink tube print Main
and Div
WIFI Yellow Shrink tube print WIFI

Electrical Properties	
Frequency Range	2x 617~6000MHz 1x 2.4~6.0GHz
Impedance	50 Ω
V.S.W.R.	Cellular :617MHz≤5.0 698~960≤3.5 1710~6000MHz≤2.0 WiFi :≤2.0
Radiation	Omni
Gain	Cellular :4.5dBi WiFi :3.0dBi
Polarization	Vertical
Mechanical Properties	
Radome	PC+ABS
Standard Connector	SMA
Waterprooflevel	IP67
Operating Temp	-40°~+85°



Electrical properties	
Frequency	4G 5G:617~6000MHz WIFI: 2.4~7.2GHz
Impedance	50 ohm Nominal
4G/5G Efficiency%	617~960MHz~~Efficiency45.5~70% 1710~2170MHz~~Efficiency65~73% 2300~2700MHz~~Efficiency67~80% 3300~3800MHz~~Efficiency62~87% 5100~6000MHz~~Efficiency64~81%
WiFi Efficiency%	2.4~2.5GHz~~Efficiency68~83% 4.9~5.9GHz~~Efficiency69~79% 6.1~7.2GHz~~Efficiency77~90%
Connector	SMA or customized
Cable length	RS031 BLACK 1.5 Meter
Coax cable loss	0.81dB/M--2500MHz 0.88db/M--3000MHz 1.05db/M--4000MHz 1.21db/M--5000MHz 1.32db/M--5800MHz 1.35db/M--6500MHz
Mechanical Properties	
Radome	UV Resistant PC+ABS
Operating Temp	-40℃ to +80℃
Radome Color	Black

4G/5G Antenna Gain & Efficiency

Frequency(MHz)	Gain	Efficiency
699MHz	0.97dBi	50.3%
704MHz	1.04dBi	51.5%
777MHz	0.85dBi	55%
814MHz	0.35dBi	57.2%
824MHz	0.55dBi	53.5%
850MHz	0.99dBi	65%
1700MHz	4.18dBi	64.6%
1710MHz	4.19dBi	65%
1850MHz	4.11dBi	63.3%
1900MHz	4.19dBi	59.6%
2100MHz	3.91dBi	68%
2690MHz	3.2dBi	66.8%

WIFI Antenna Gain & Efficiency

Frequency(GHz)	Gain	Efficiency
2.4GHz	1.99dBi	68%
2.45GHz	2.67dBi	76.1%
2.4835GHz	2.65dBi	82%
2.5GHz	2.68dBi	83%

产品照片
Product Photos



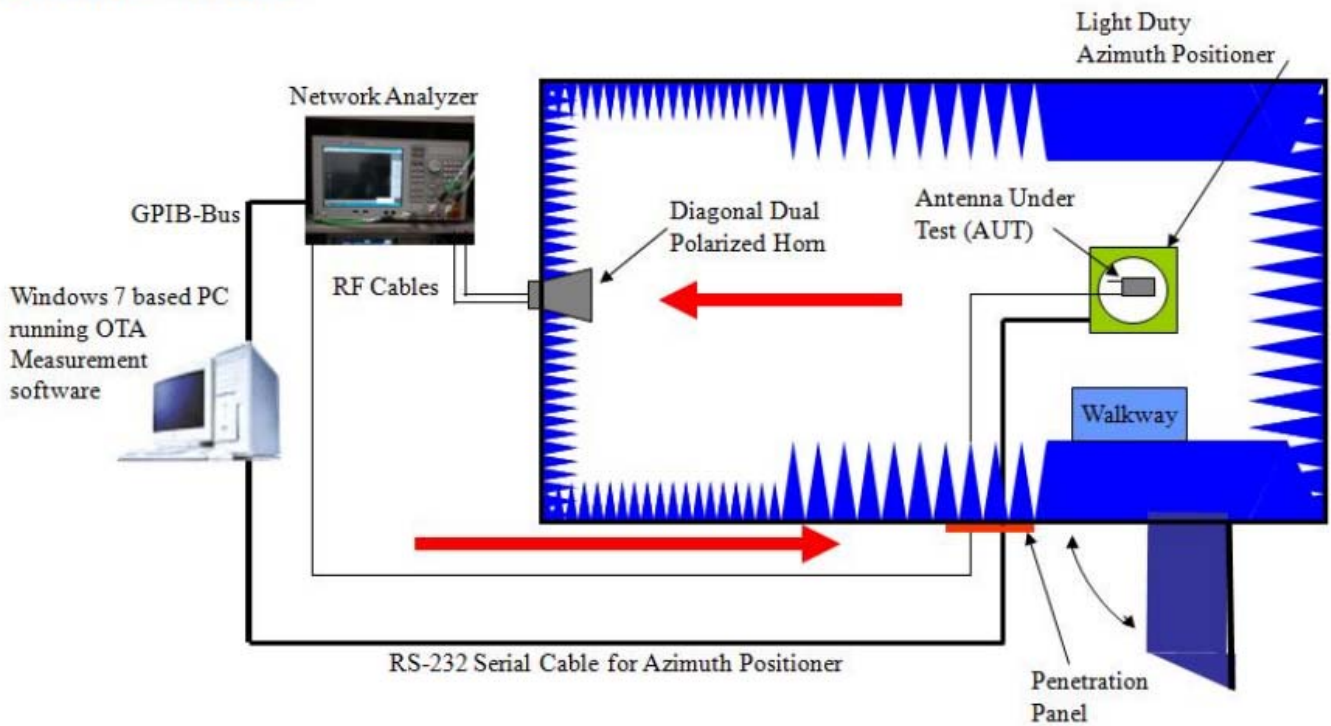
Mounting method:

M20 Screw mount, M bracket mount, L bracket mount, Mag mount

Mag mount horizontal thrust 7 kg.

Mag mount vertical pull strenght 10 kg

Passive mode



TEST INSTRUMENT :

1. AGILENT E5071C NETWORK ANALYZER
2. 3D OTA Chamber(WanShih)

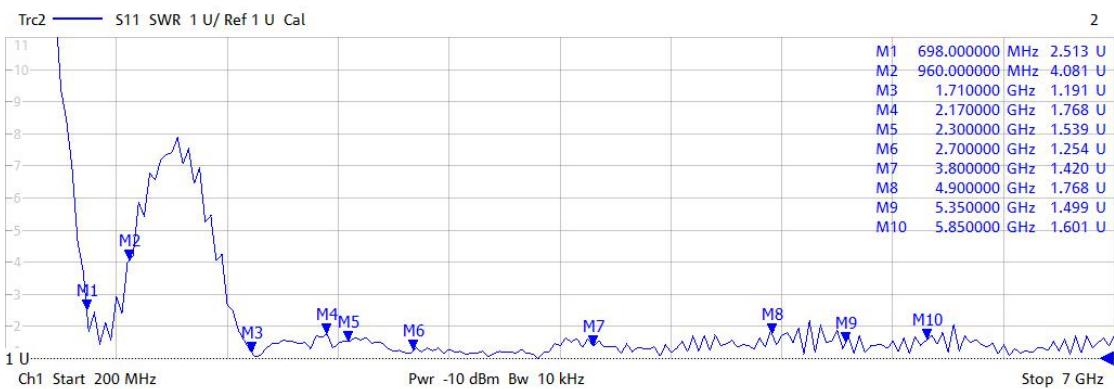
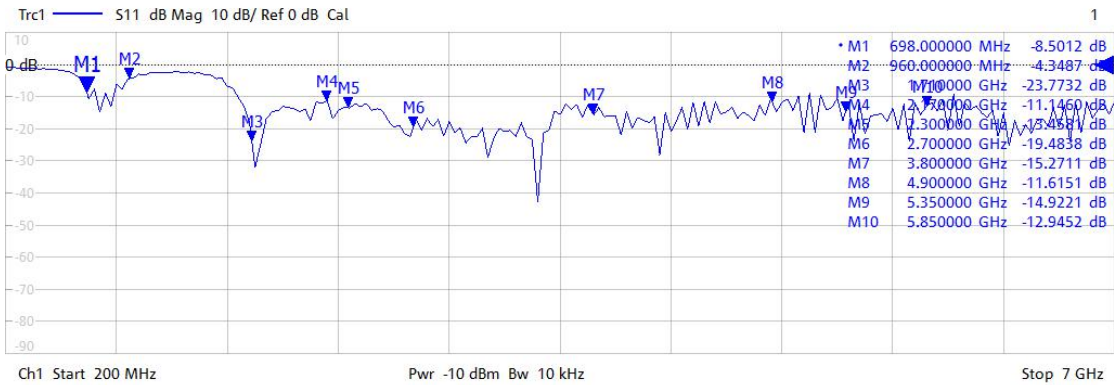
Anechoic Chamber External Dimensions

(L x W x H): 8m x 4m x 4m

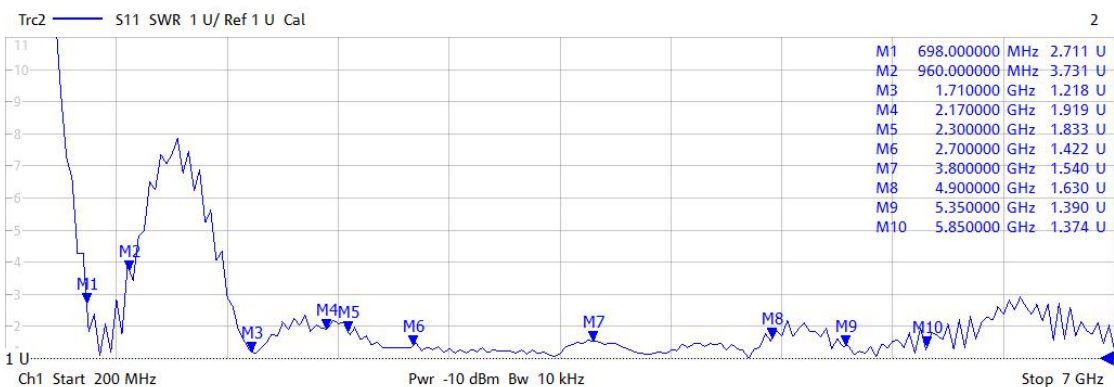
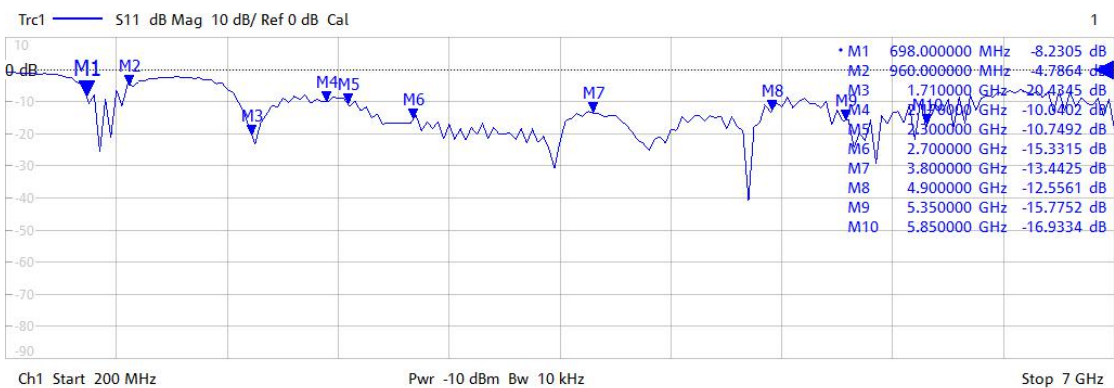


4G/5G Antenna VSWR with RS31 Cable 1.5M

8/14/2024 8:04:18 PM
1328.5170K92-101595-Kd



8/14/2024 8:03:58 PM
1328.5170K92-101595-Kd

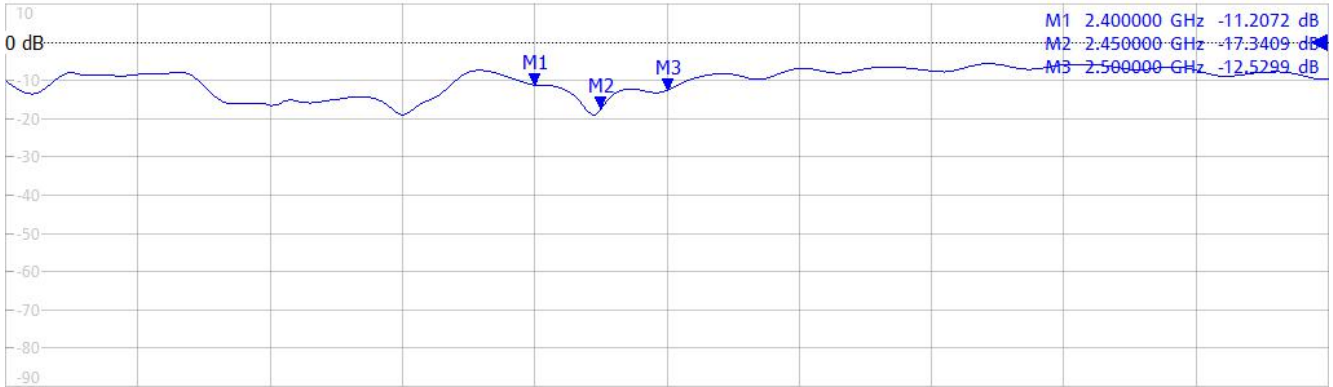


WIFI Antenna VSWR with RS31 Cable 1.5M

8/14/2024 8:03:01 PM
1328.5170K92-101595-Kd

Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal

1



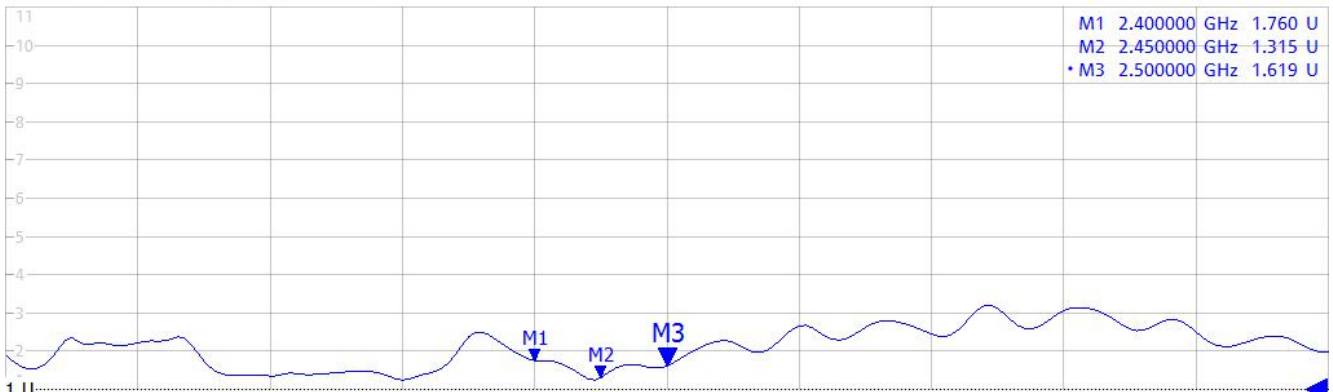
Ch1 Start 2 GHz

Pwr -10 dBm Bw 10 kHz

Stop 3 GHz

Trc2 — S11 SWR 1 U/ Ref 1 U Cal

2



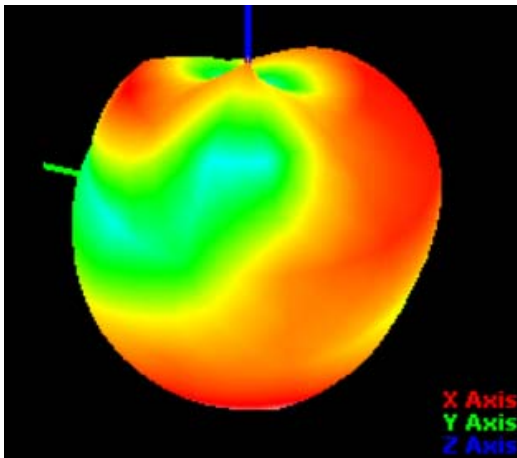
Ch1 Start 2 GHz

Pwr -10 dBm Bw 10 kHz

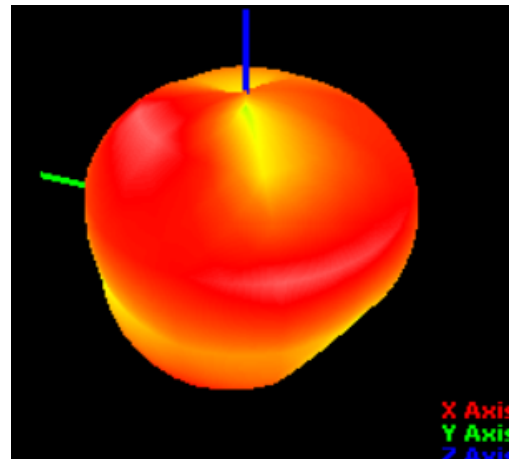
Stop 3 GHz



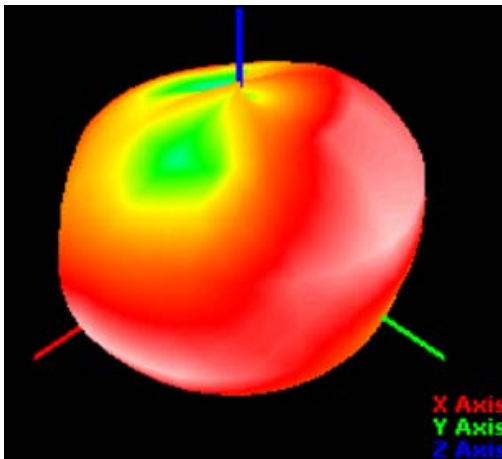
4G/5G-1 Antenna Radiation Patterns



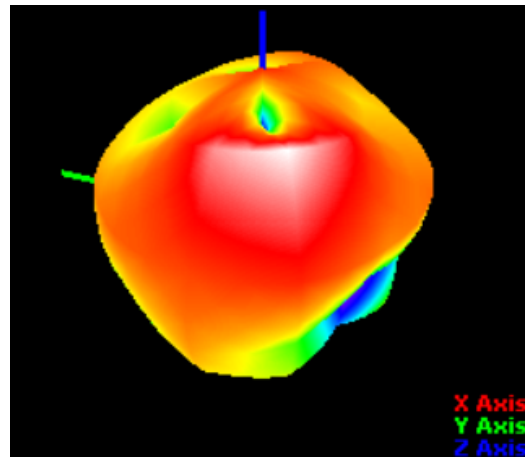
617 MHz



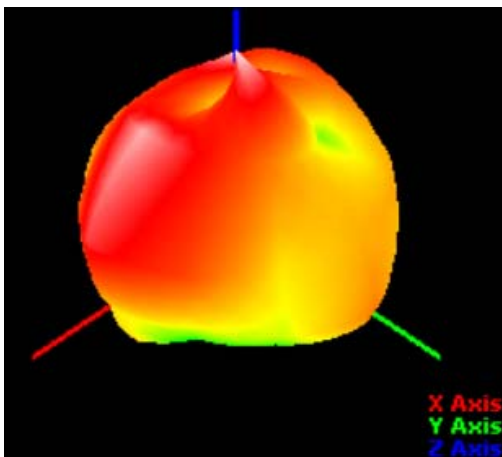
698 MHz



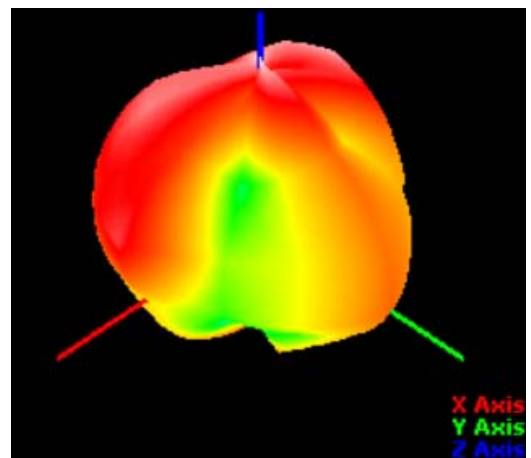
960 MHz



1710 MHz

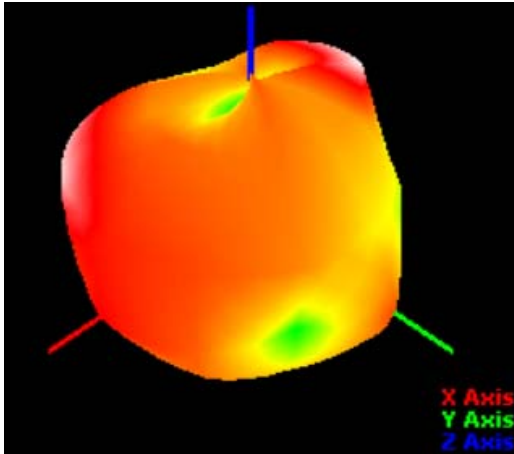


2170 MHz

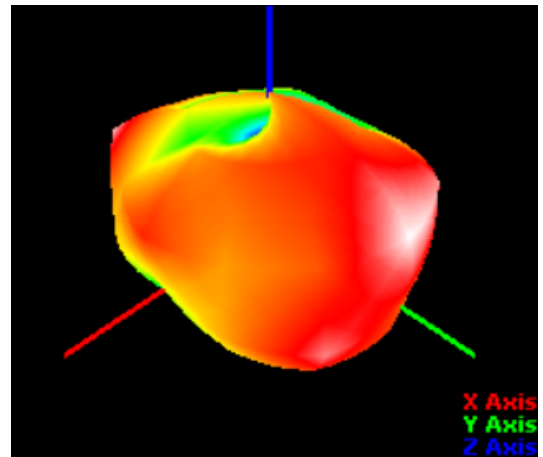


2300 MHz

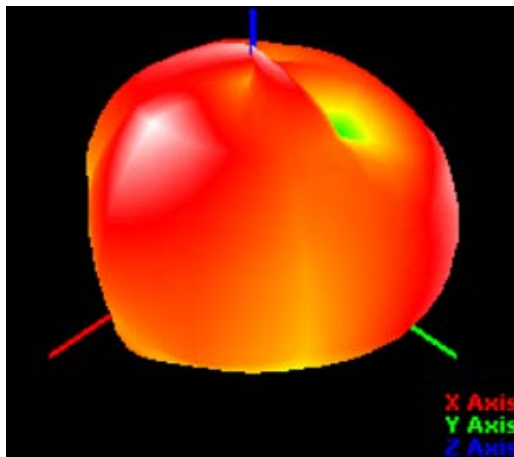
4G/5G Antenna Radiation Patterns



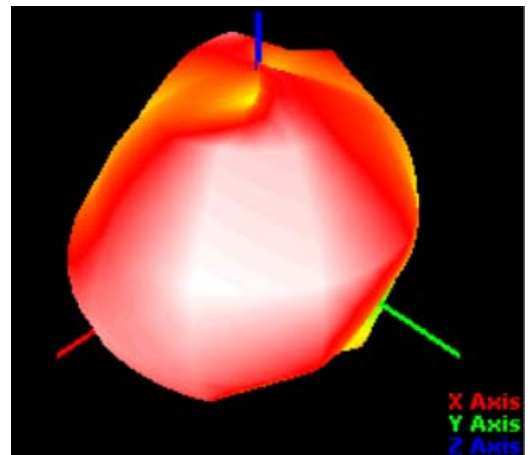
2700 MHz



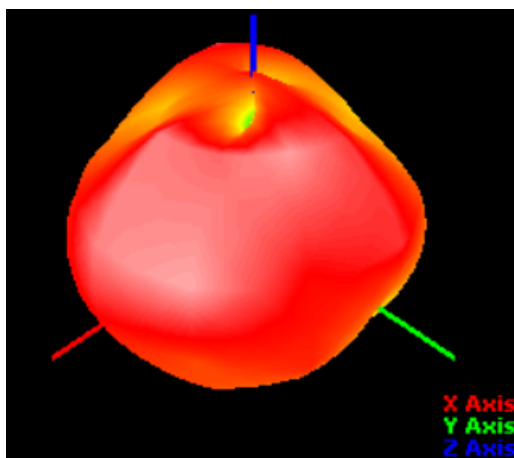
3800MHz



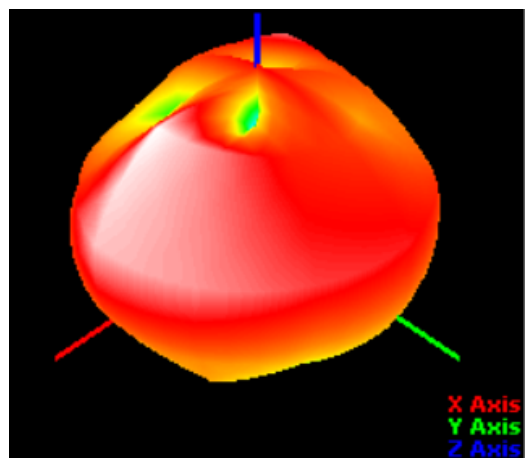
4900 MHz



5500 MHz

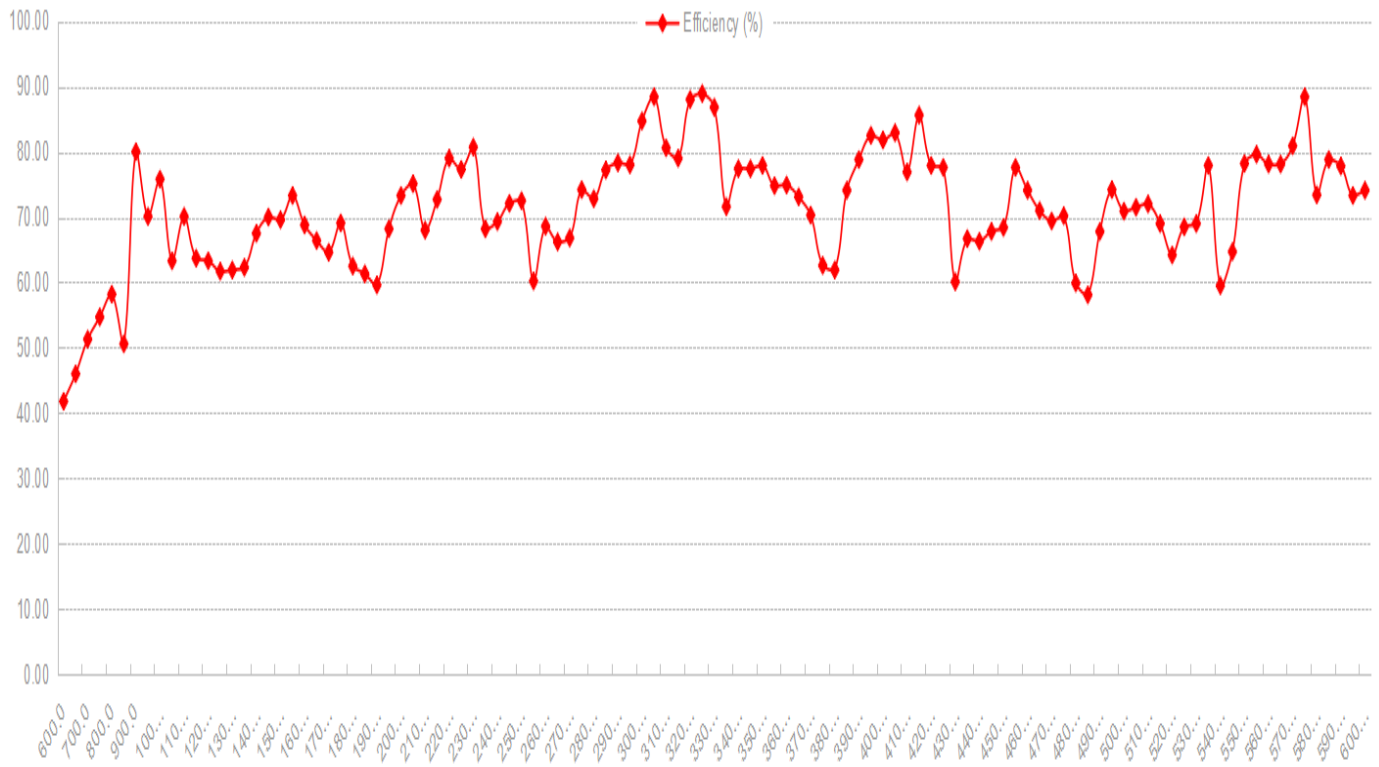


5800 MHz

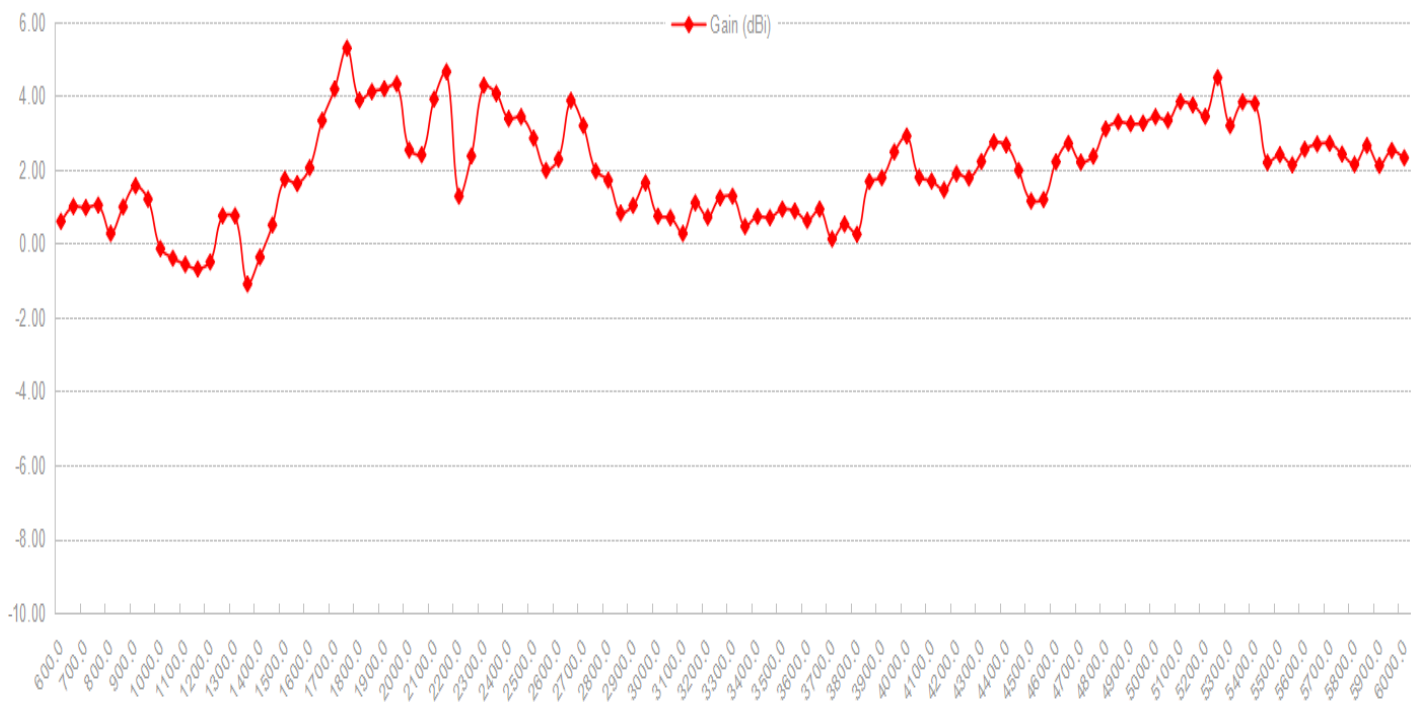


6000 MHz

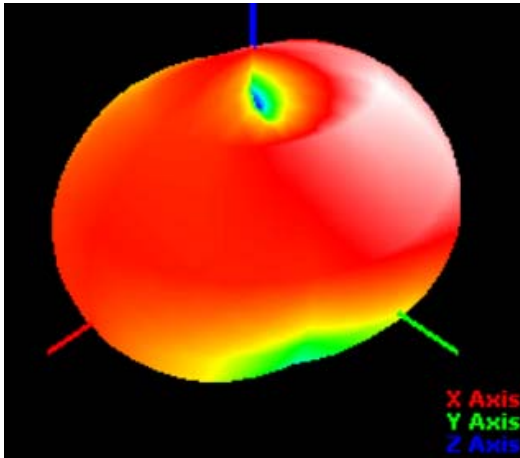
4G/5G Antenna Efficiency(%)



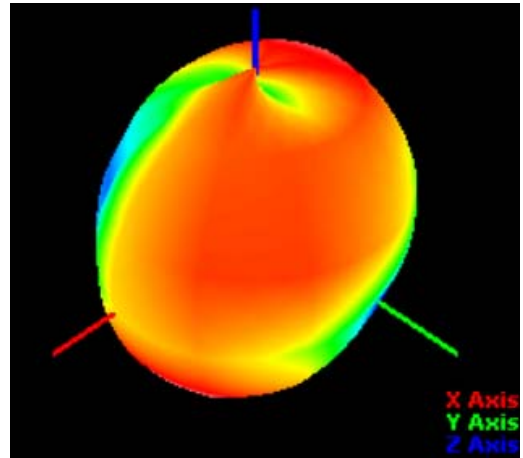
4G/5G Antenna Gain(dBi)



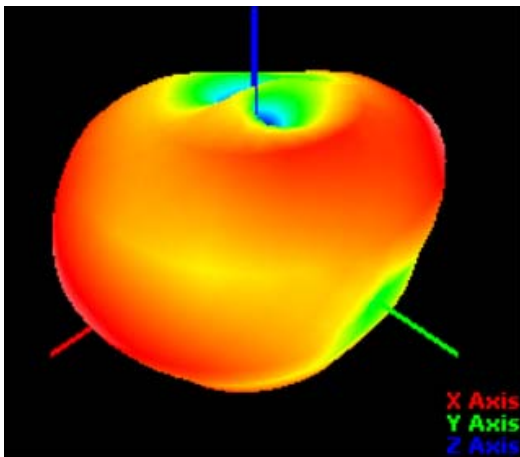
4G/5G-2 Antenna Radiation Patterns



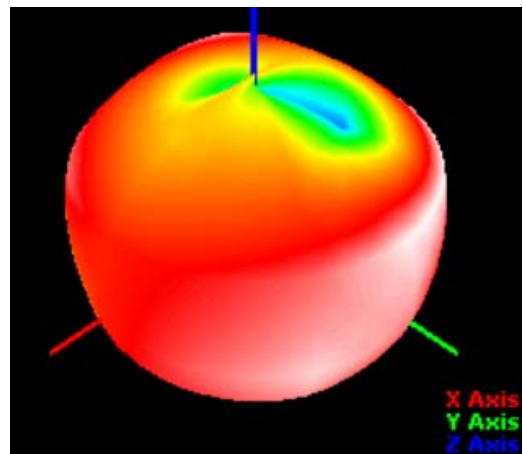
617 MHz



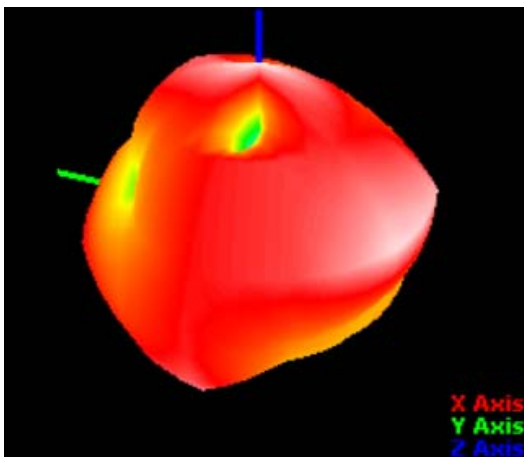
698 MHz



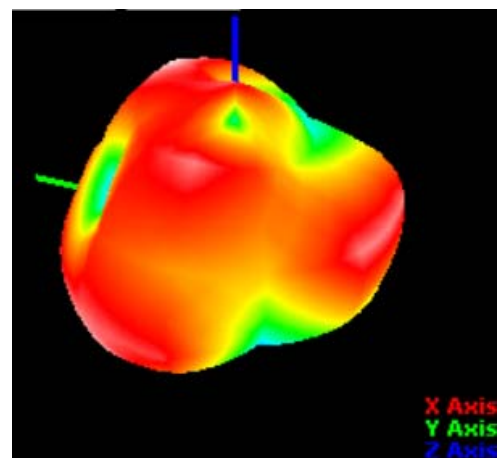
960 MHz



1710 MHz

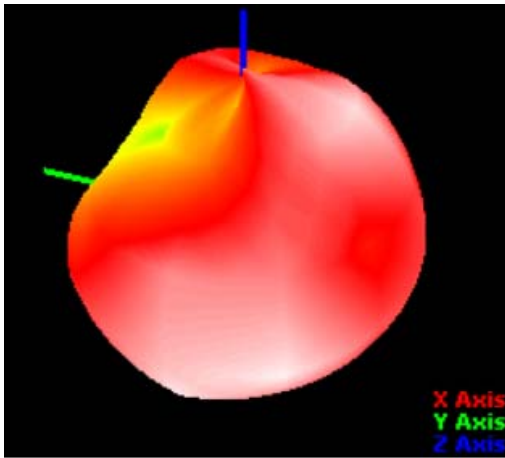


2170 MHz

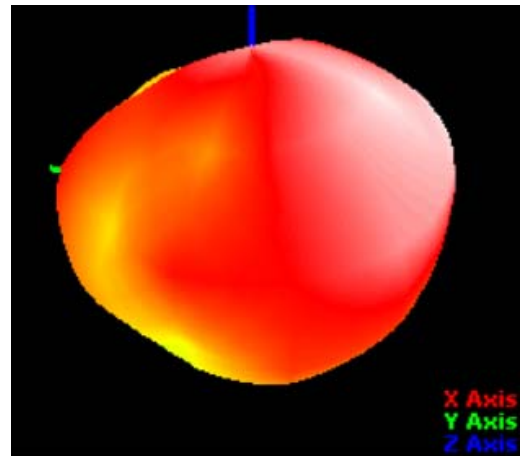


2300 MHz

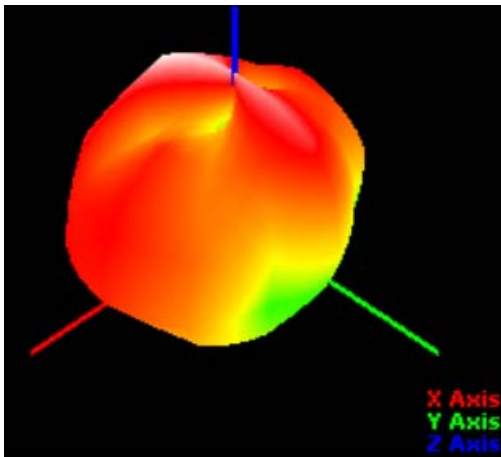
4G/5G-2 Antenna Radiation Patterns



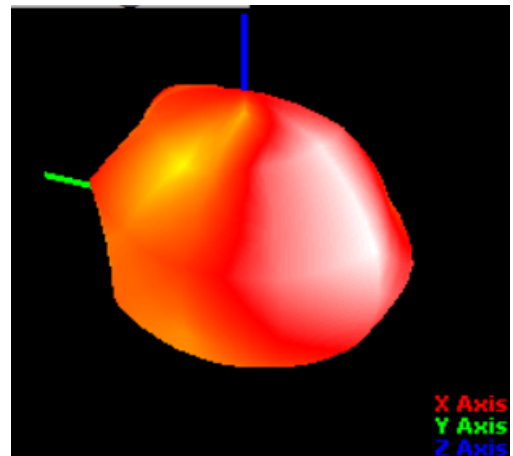
2700 MHz



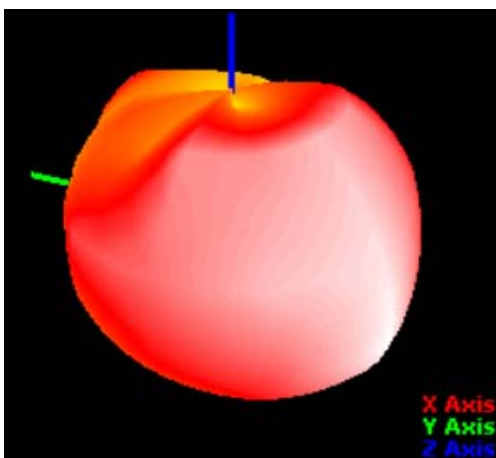
3800MHz



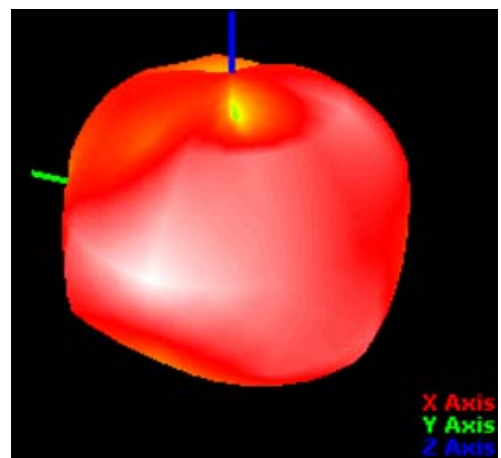
4900 MHz



5500 MHz

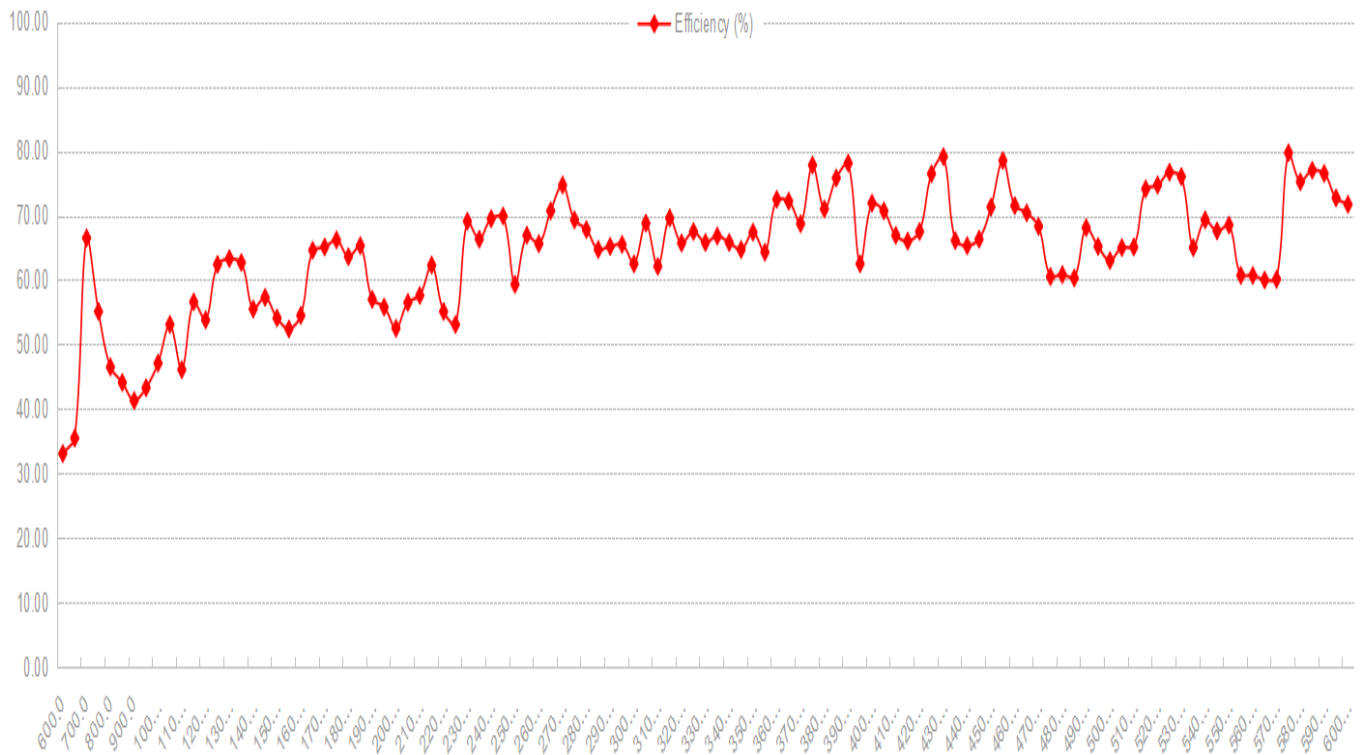


5800 MHz

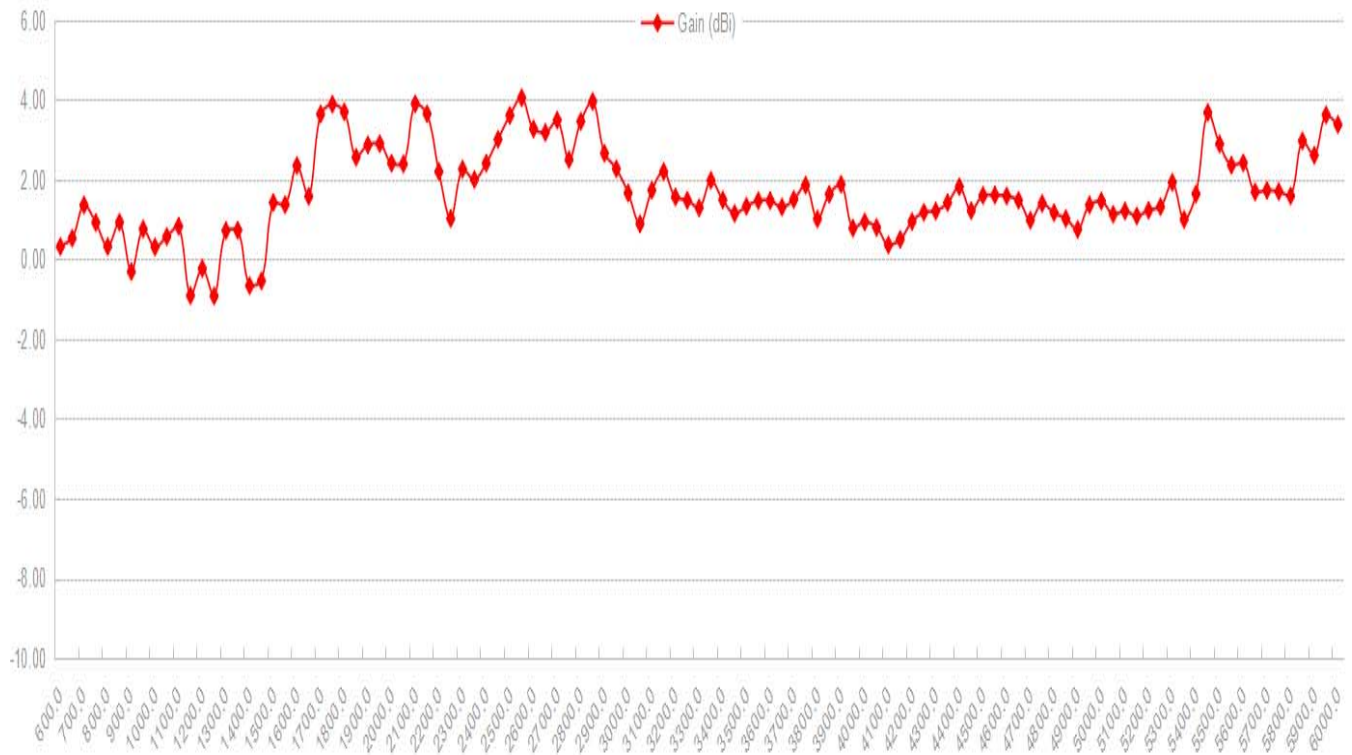


6000 MHz

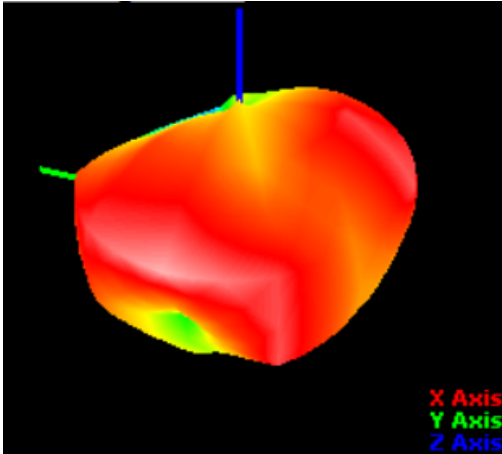
4G/5G-2 Antenna Efficiency(%)



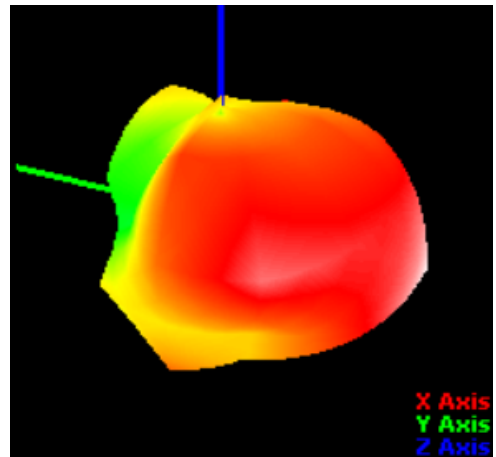
4G/5G Antenna Gain(dBi)



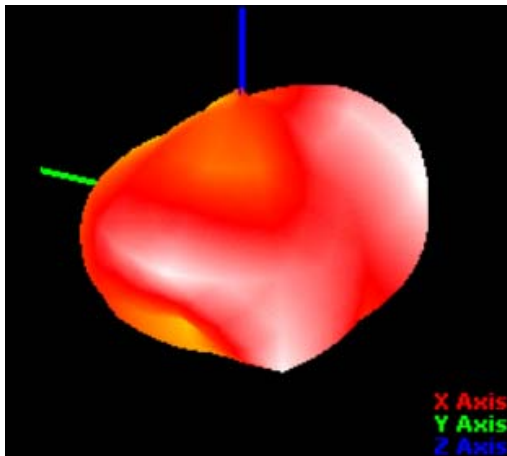
WIFI Antenna Radiation Patterns



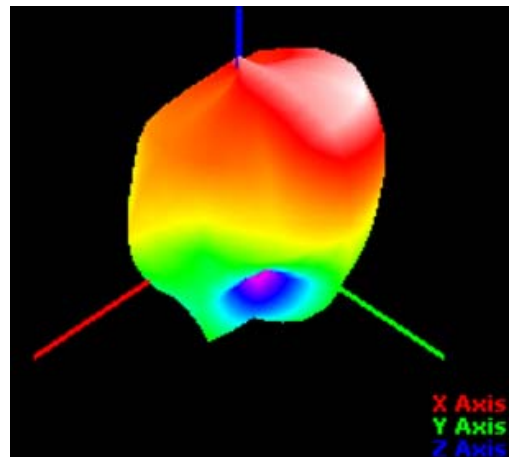
2.4GHz



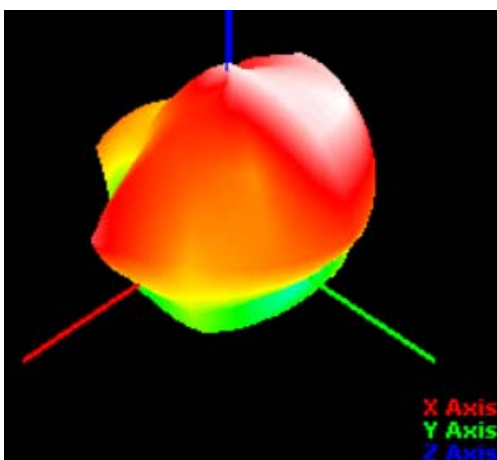
2.45GHz



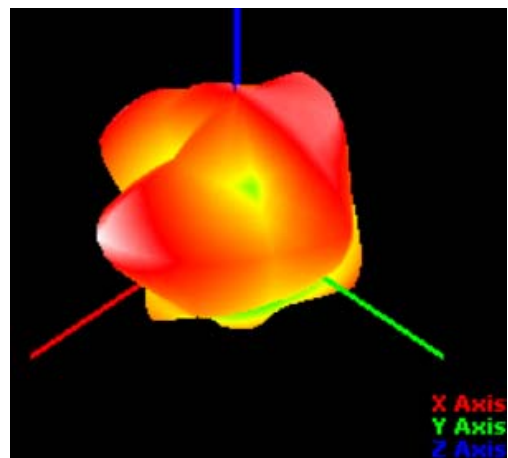
2.5GHz



5.15GHz

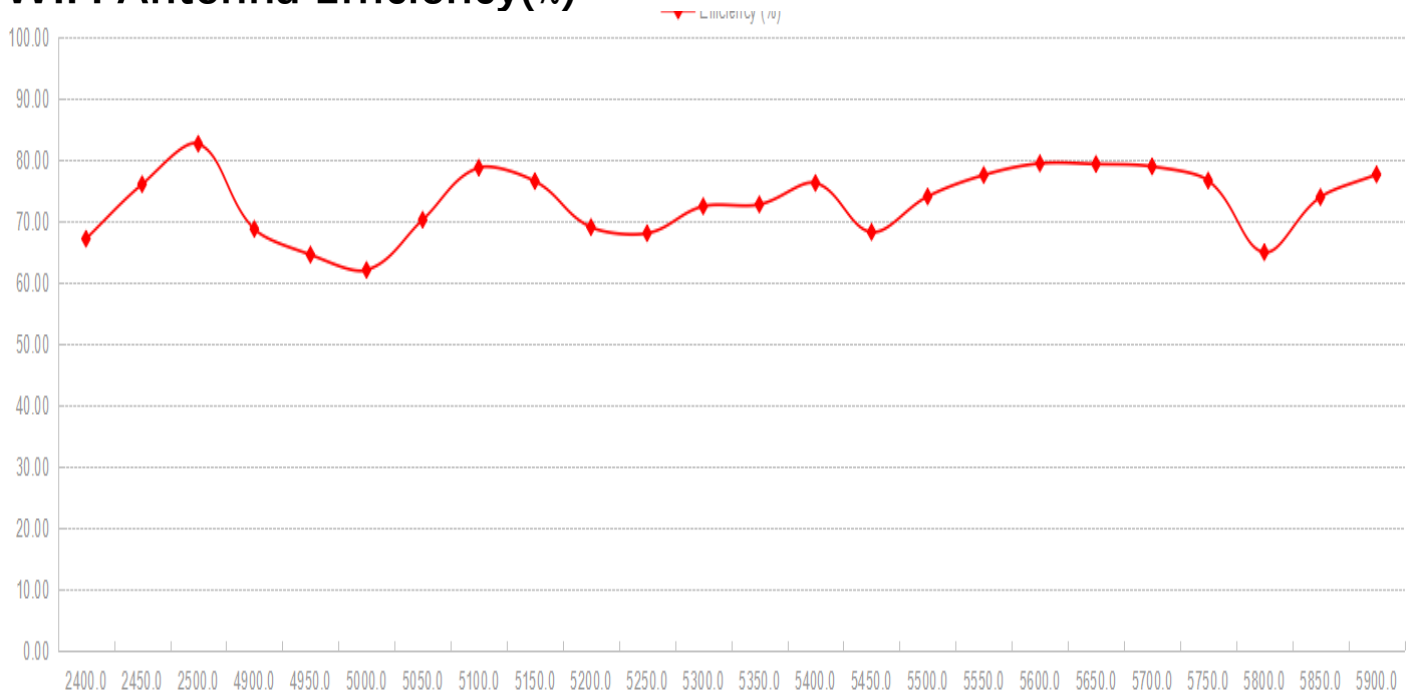


5.55GHz



5.85GHz

WIFI Antenna Efficiency(%)



WIFI Antenna Gain(dBi)

