



# HEYUAN XUNWEI MICROWAVE COMMUNICATION CO.,LTD

## Mobile antenna test report

RF: Kang Guangqi

Date: 2023.09.22

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# 1、 Test equipment

Wireless communications test set: CMW500

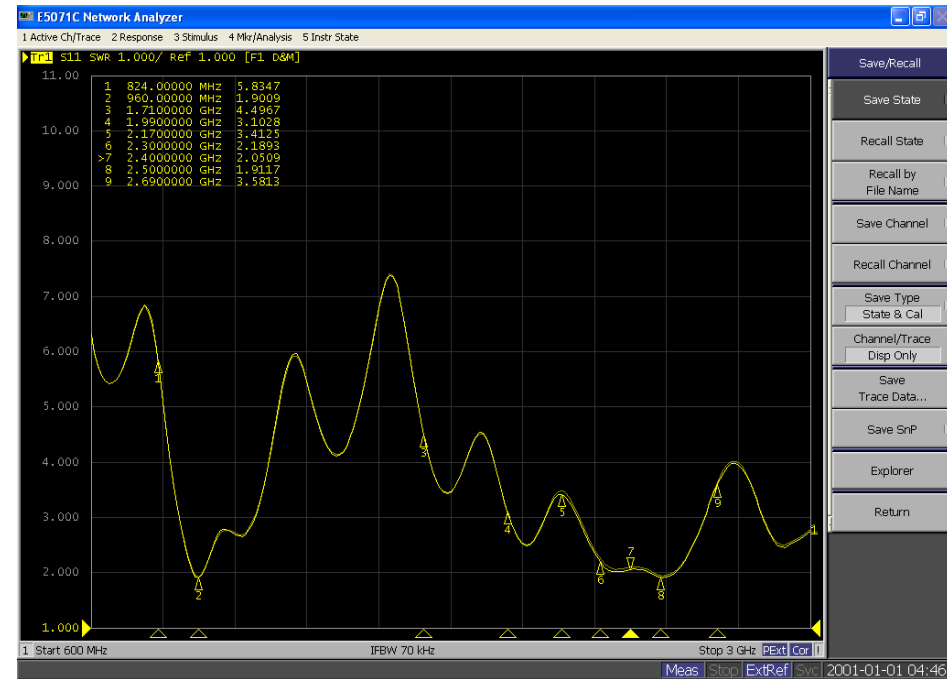
Network Analyzer: Agilent 5071B

Anechoic Chamber : SATIMO SG24



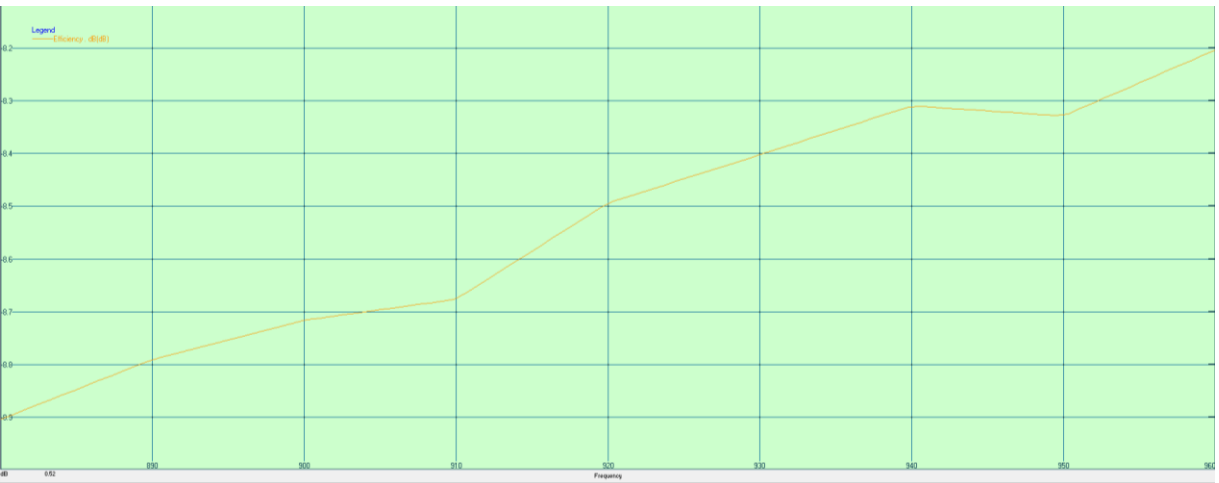
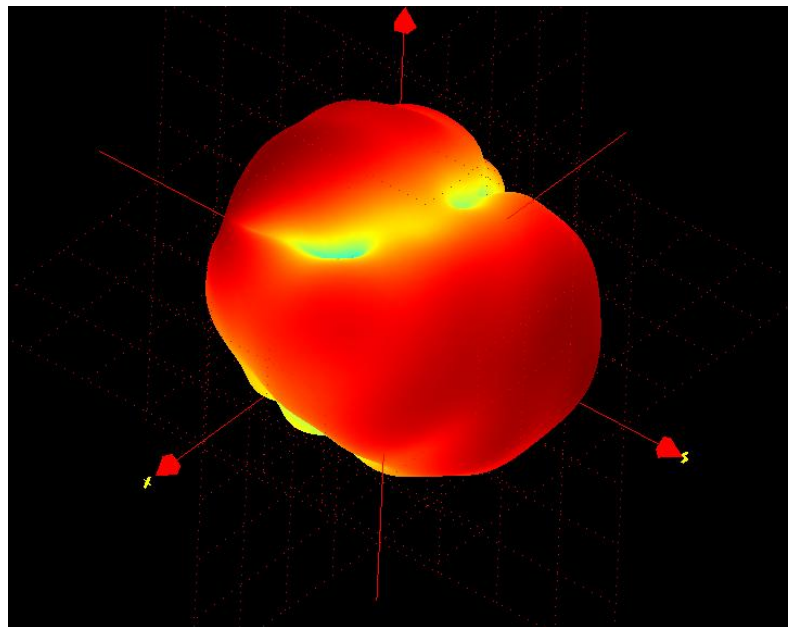
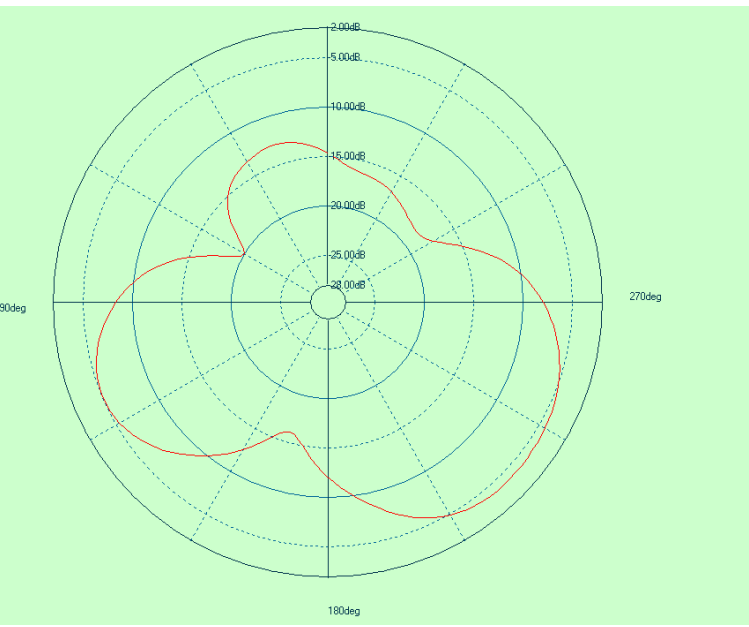
# 2、 Passive data

## 2.1 Main antenna Return Loss & VSWR

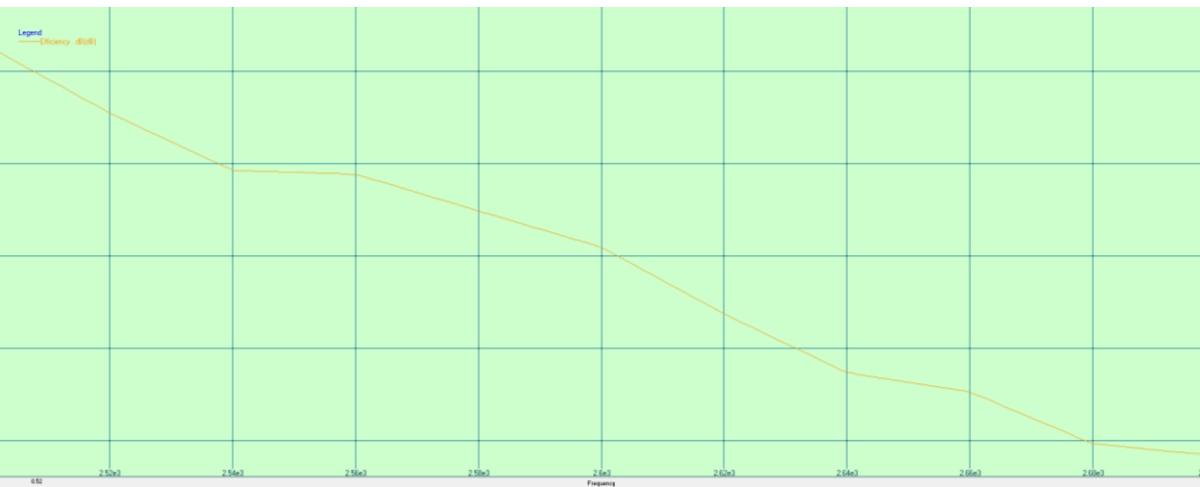
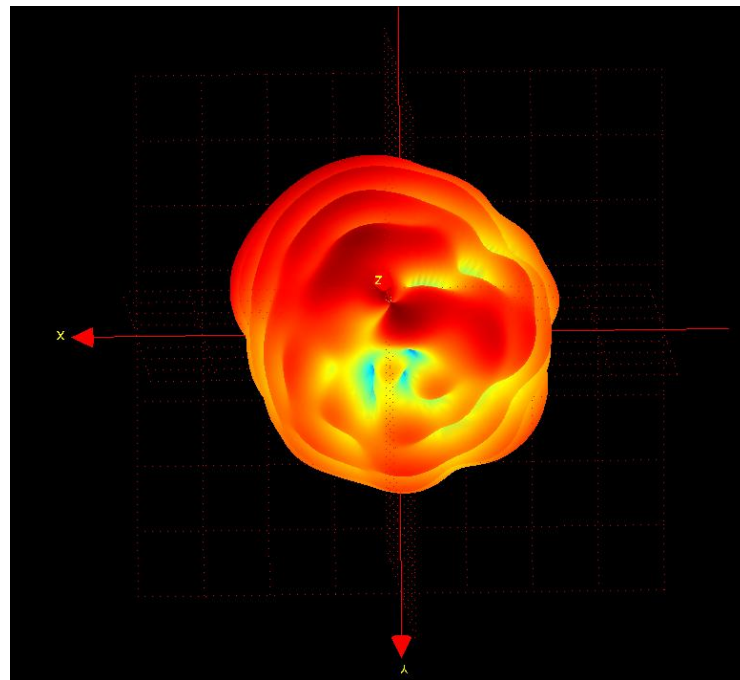
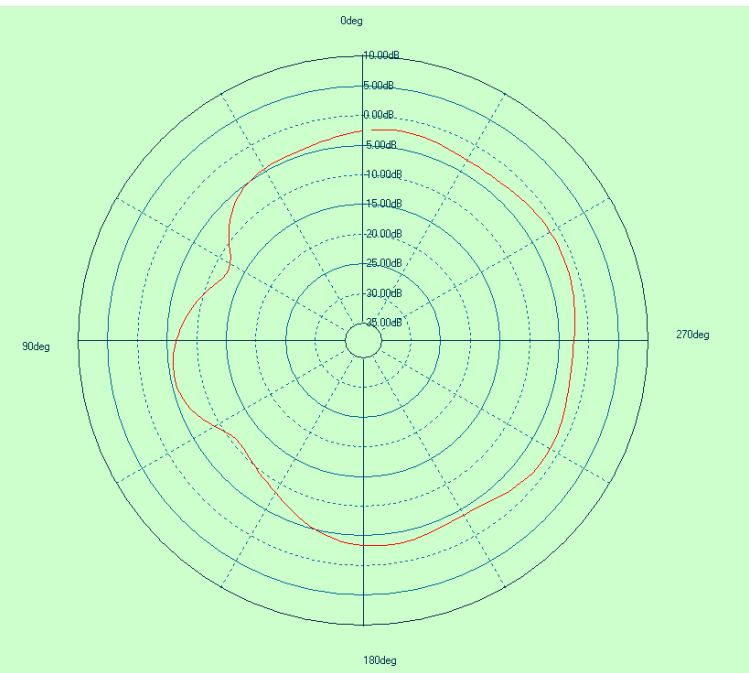


Frequency	960MHZ	2500MHZ
Return Loss	-10.4	-10.0
VSWR	1.9	1.9

# 2.2 Main antenna Peak Gain

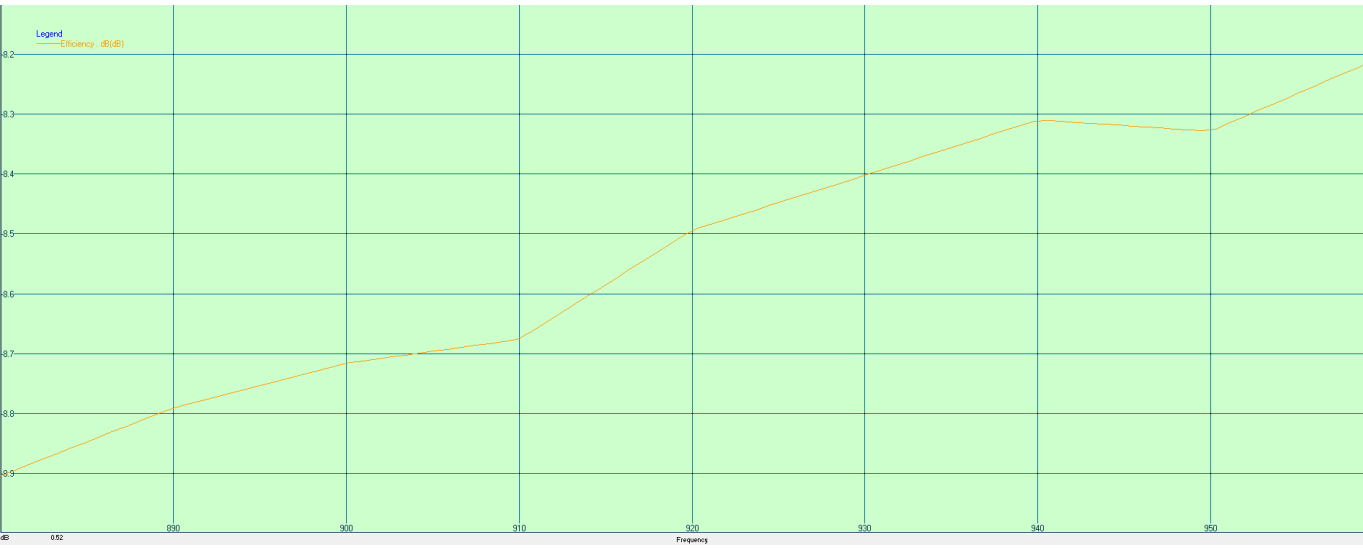


960MHZ	Peak Gain
XZ-Plane	-1.3
YZ-Plane	-1.5
XY-Plane	-1.0

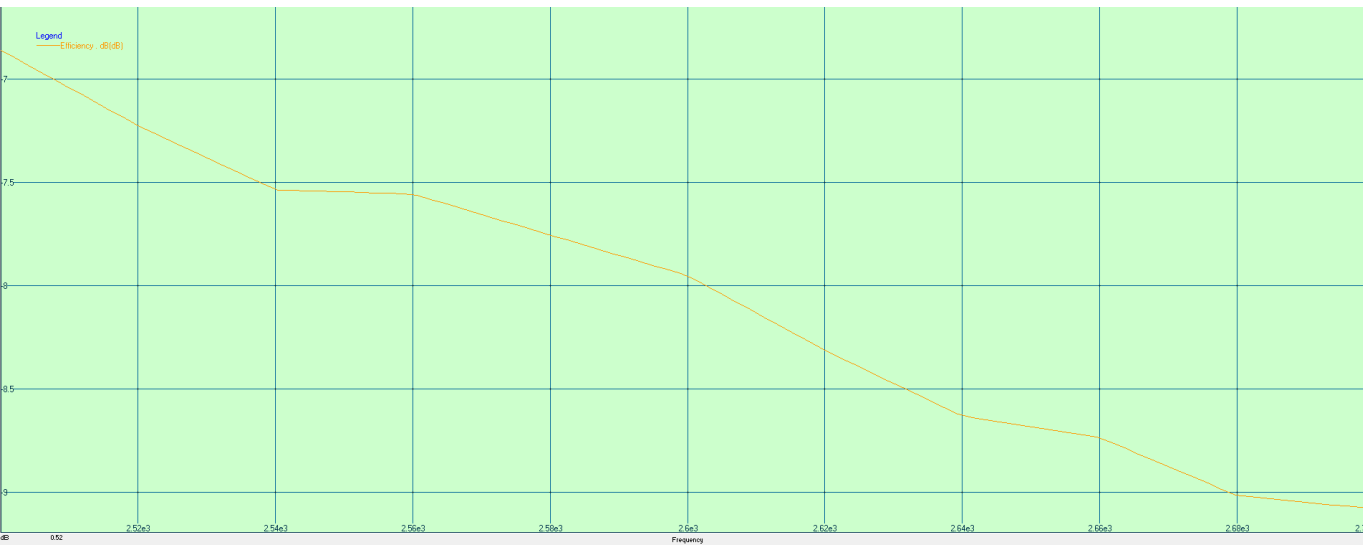


2500MHZ	Peak Gain
XZ-Plane	-0.8
YZ-Plane	-1.0
XY-Plane	-0.9

# 2.3 Main antenna Efficiency



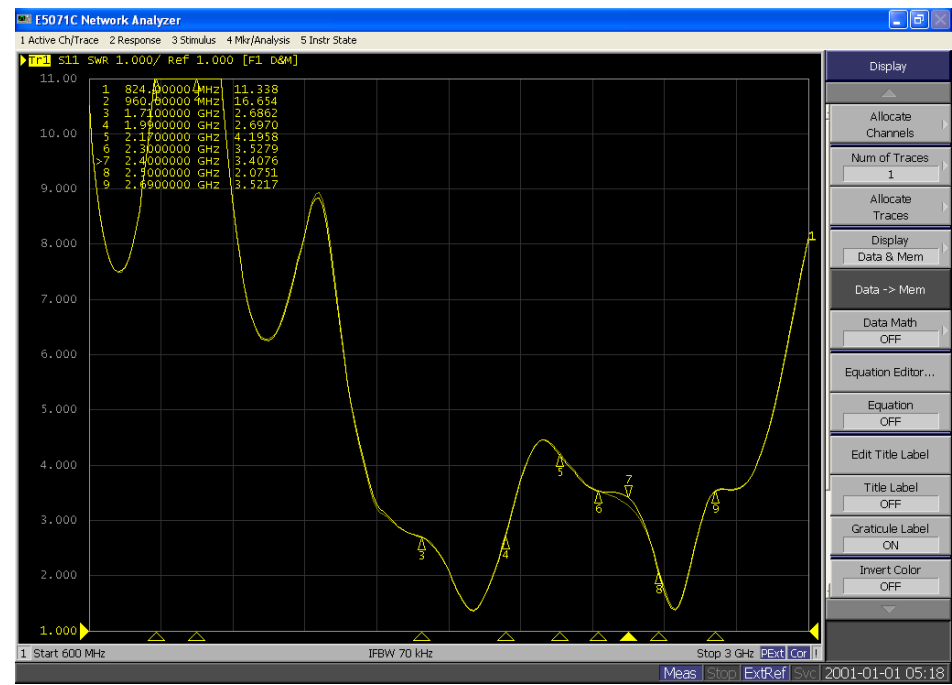
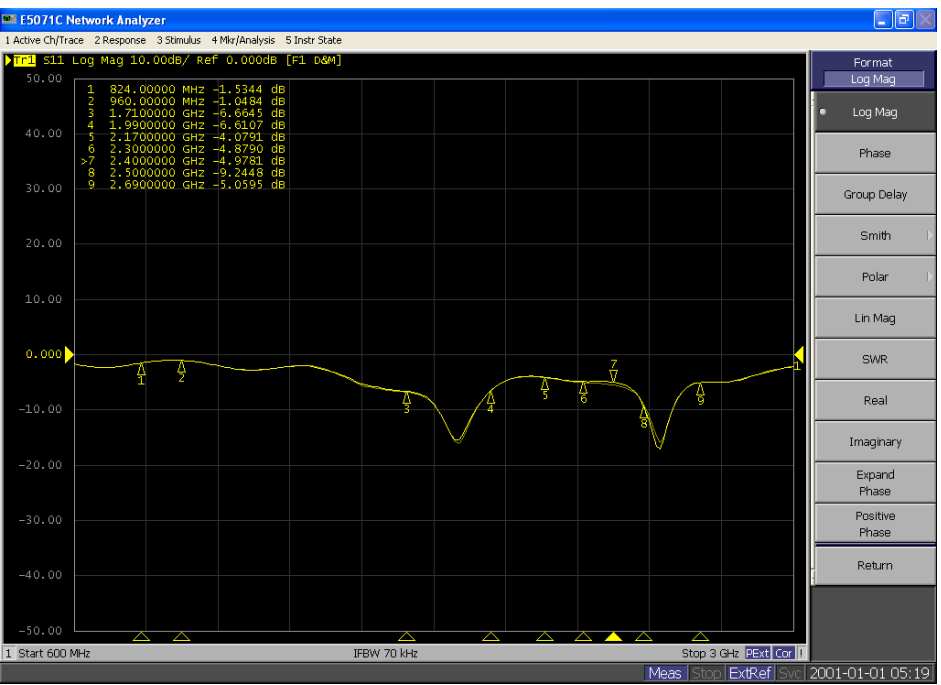
960MHZ



2500MHZ

Frequency	960MHZ	2500MHZ
Efficiency	27.3%	30.6%

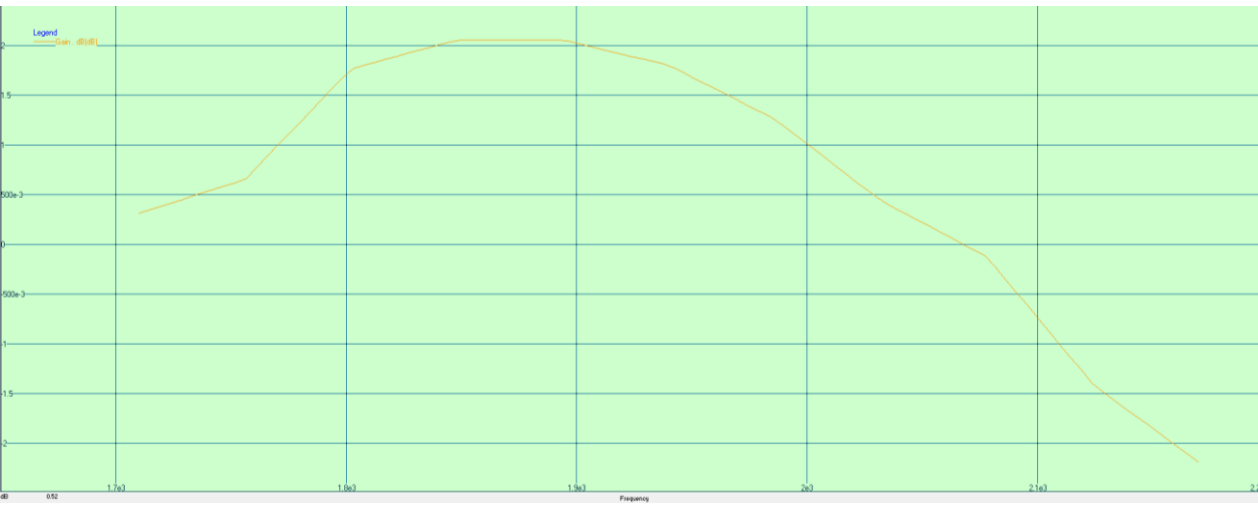
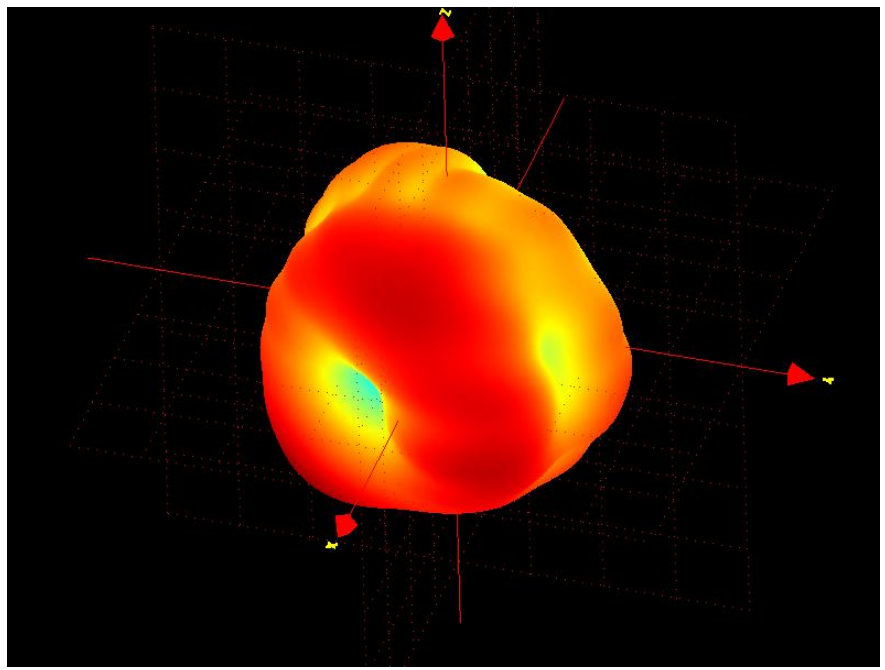
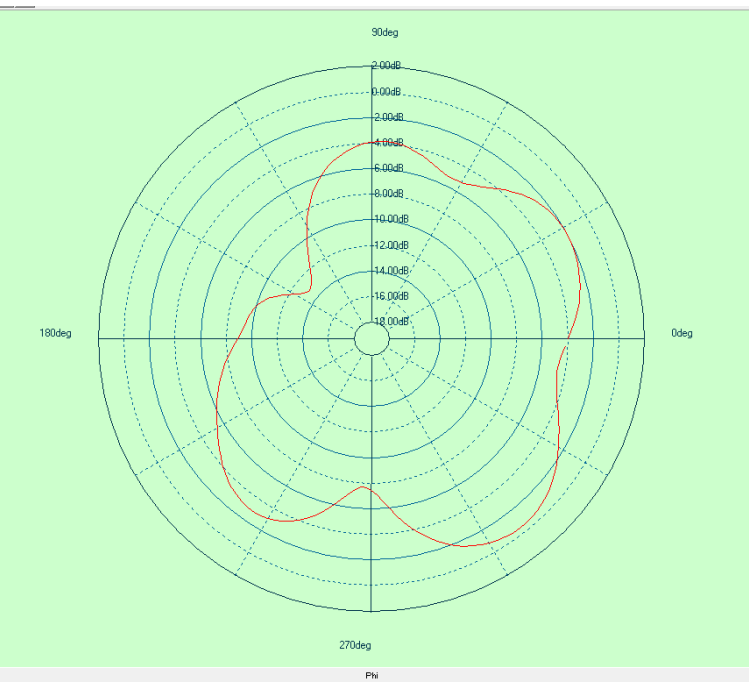
# 2.4 Div antenna Return Loss



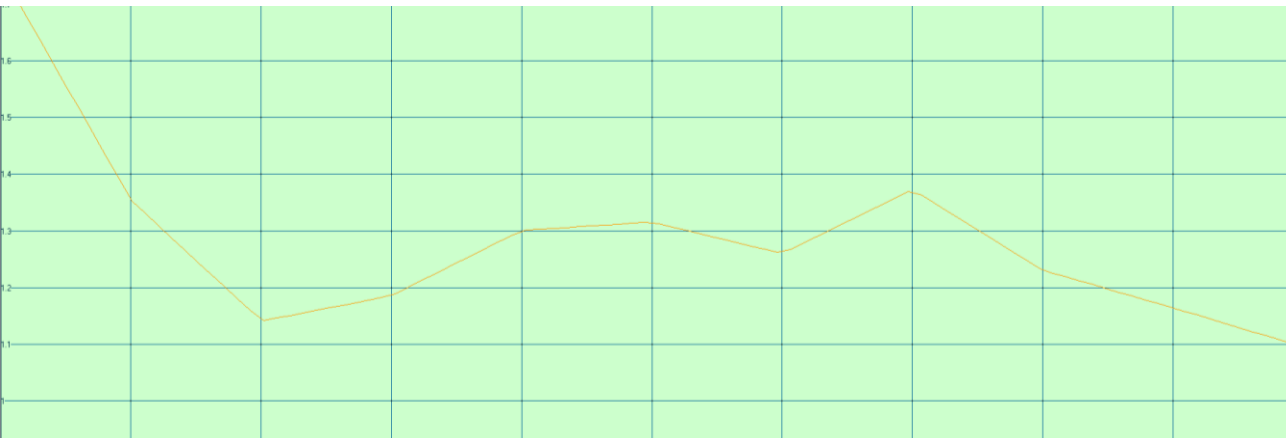
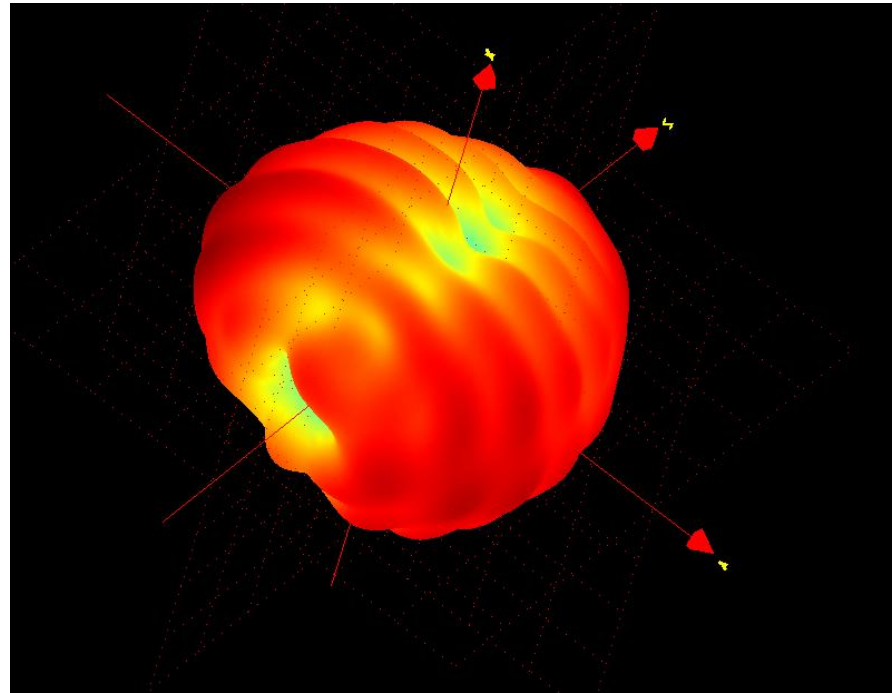
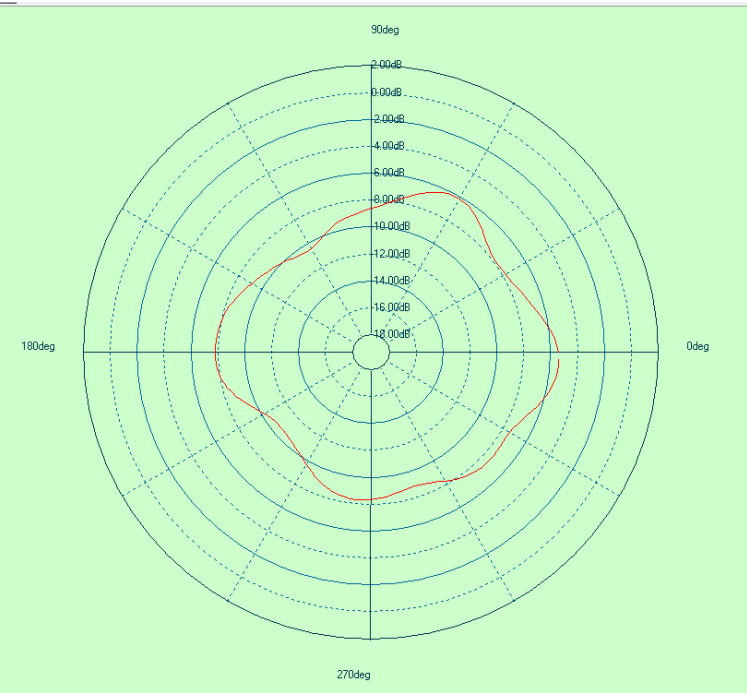
Frequency	1710MHZ	2170MHZ
Return Loss	-6.6	-4.0
VSWR	2.6	4.1



# 2.5 Div antenna Peak Gain

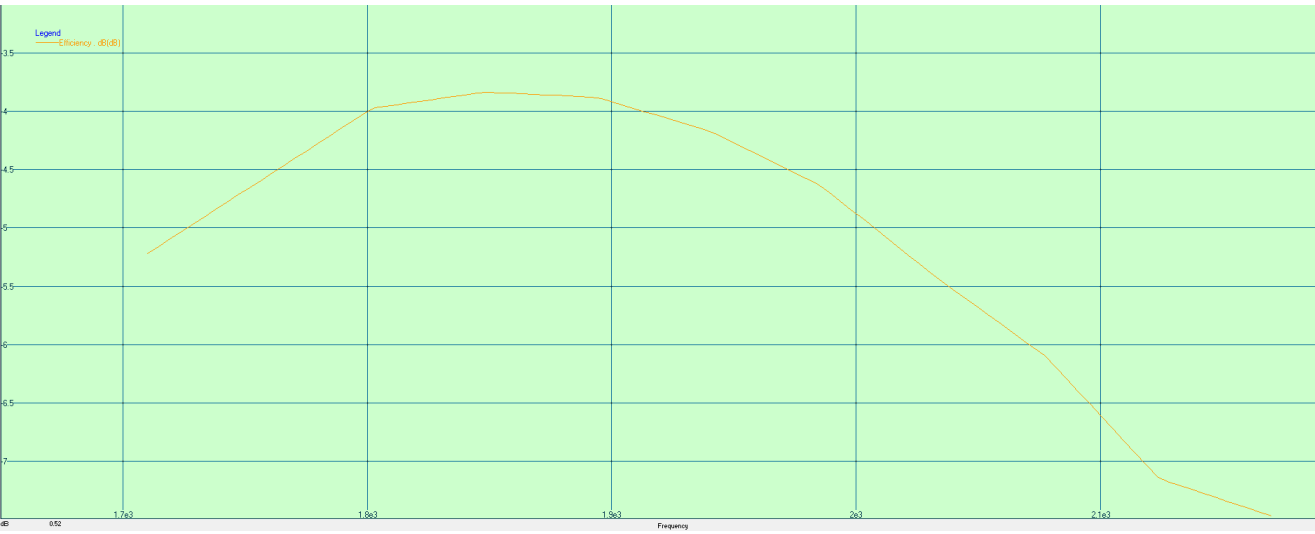


1710MHZ	Peak Gain
XZ-Plane	-0.7
YZ-Plane	-1.0
XY-Plane	-0.9



2170MHZ	Peak Gain
XZ-Plane	-1.1
YZ-Plane	-0.7
XY-Plane	-0.8

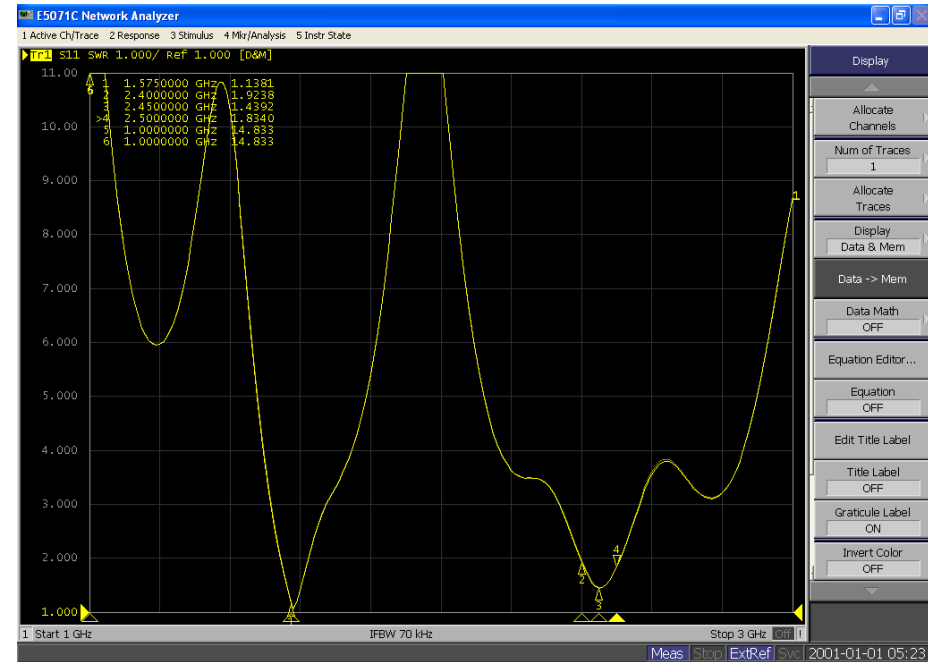
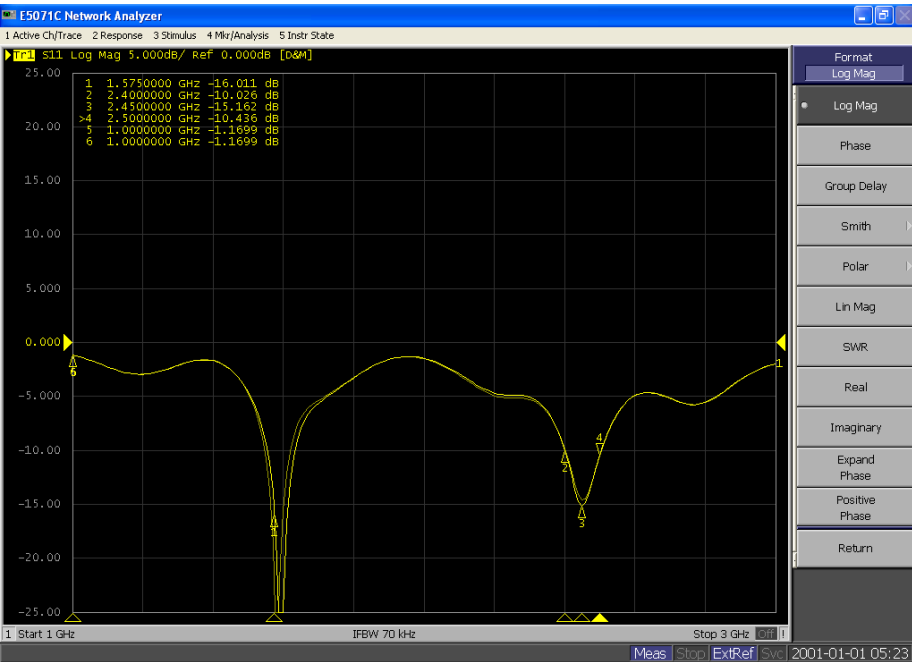
# 2.6 Div antenna Efficiency



1710~2170MHZ

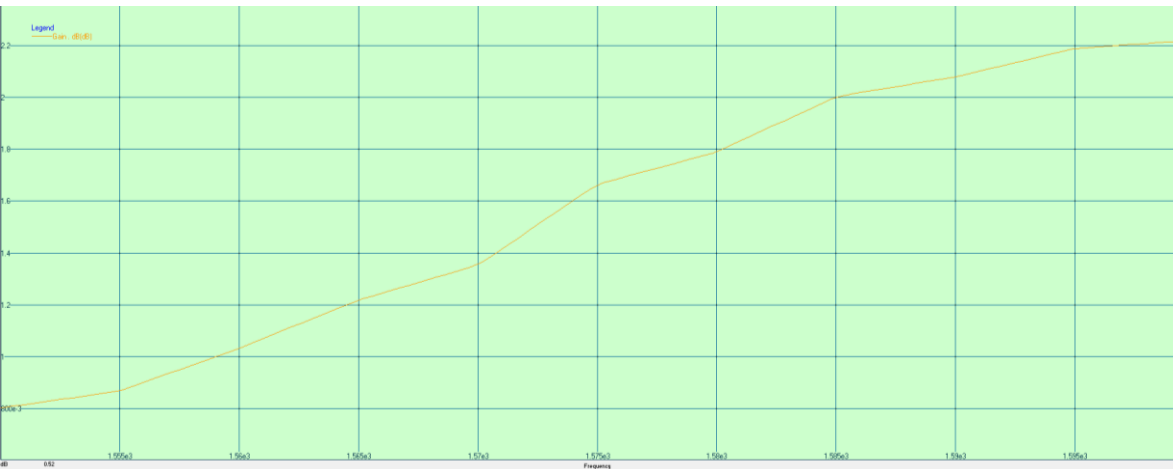
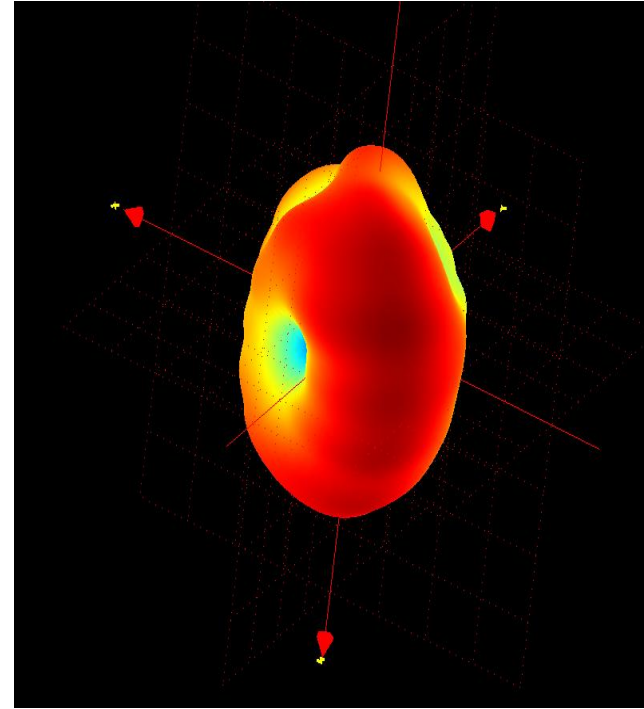
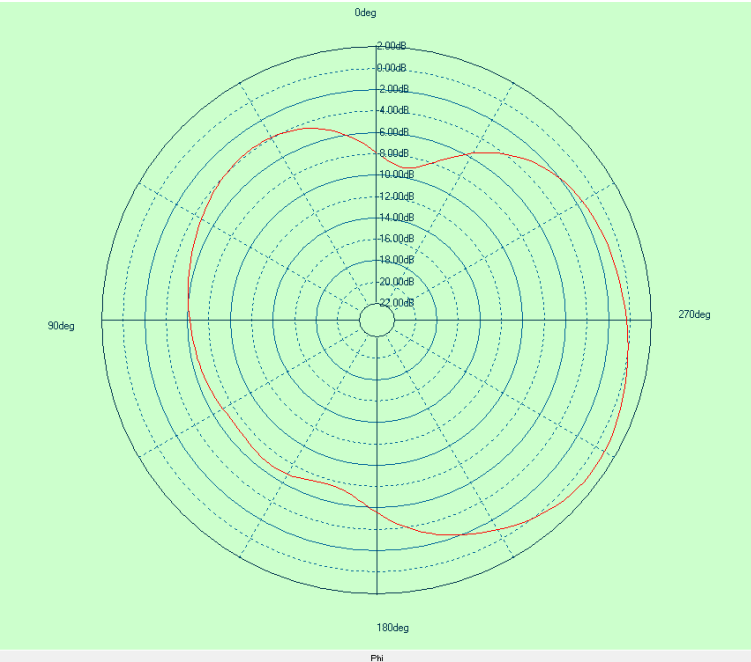
Frequency	1710MHZ	2170MHZ
Efficiency	-37.4%	-34.9%

# 2.7 GPS & WIFI antenna Return Loss

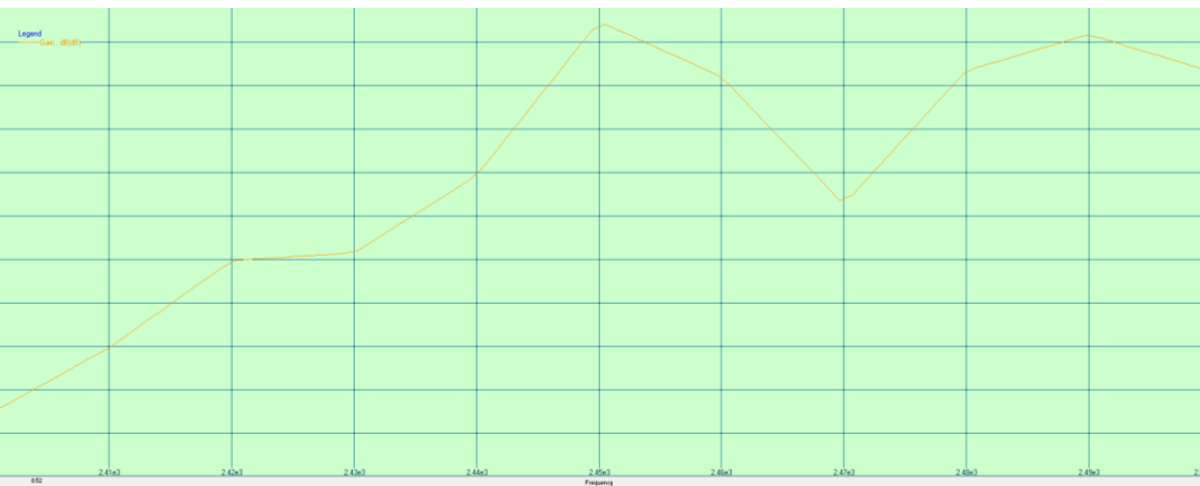
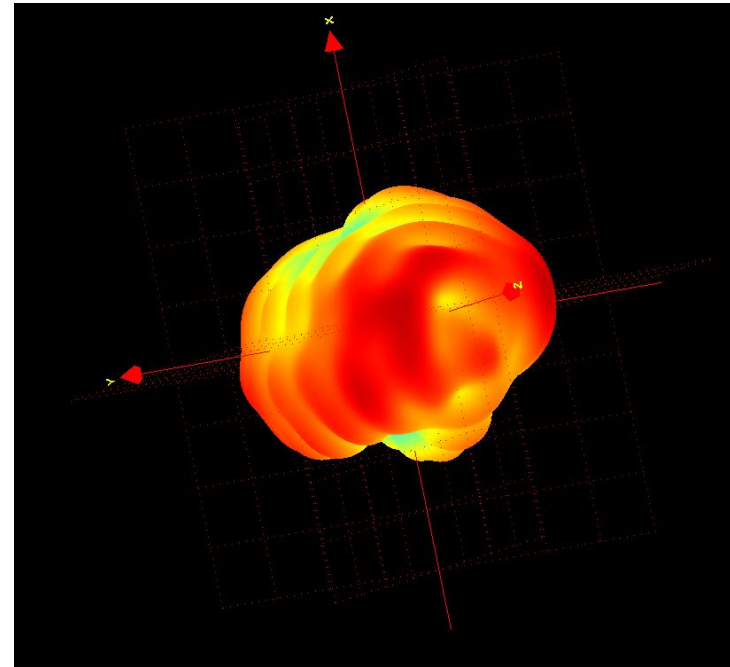
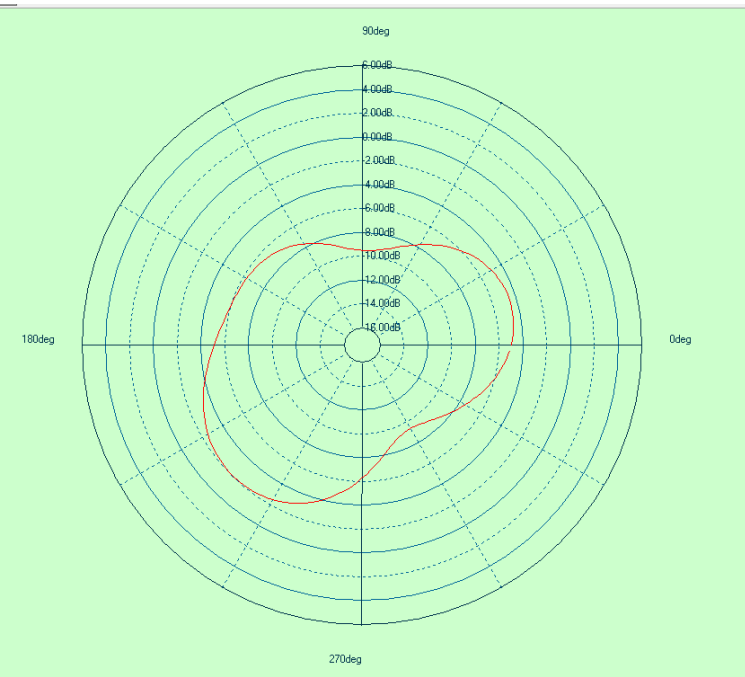


Frequency	1570MHZ	2450MHZ
Return Loss	-16.0	-15.1
VSWR	1.1	1.4

# 2.8 GPS & WIFI antenna Peak Gain

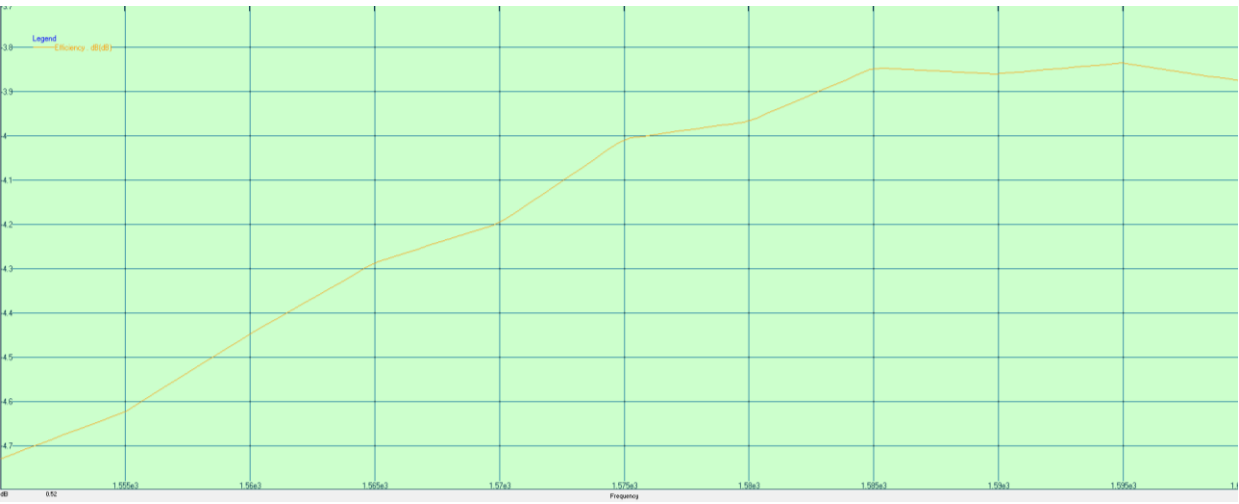


1575MHZ	Peak Gain
XZ-Plane	-0.6
YZ-Plane	0.3
XY-Plane	-0.8

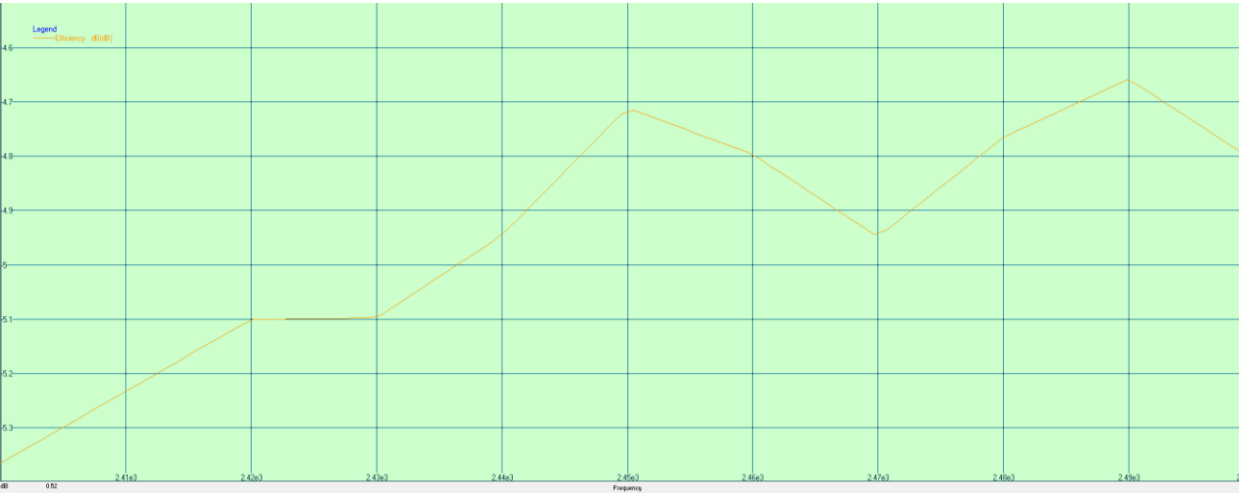


2450MHZ	Peak Gain
XZ-Plane	-0.7
YZ-Plane	-0.4
XY-Plane	0.2

# 2.9 GPS & WIFI antenna Efficiency



1575MHZ

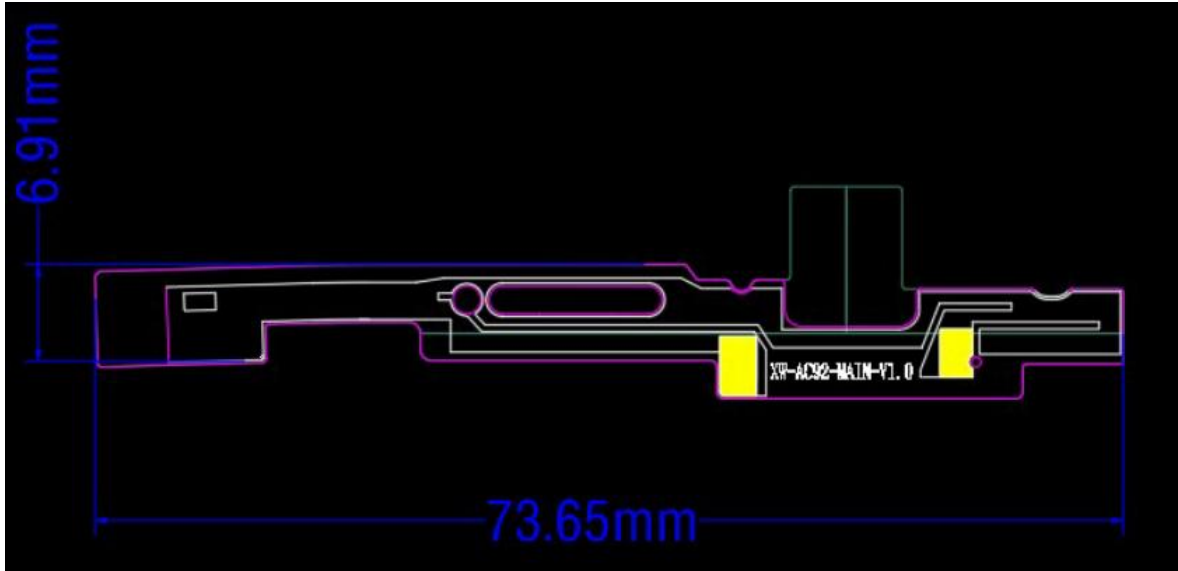


2450MHZ

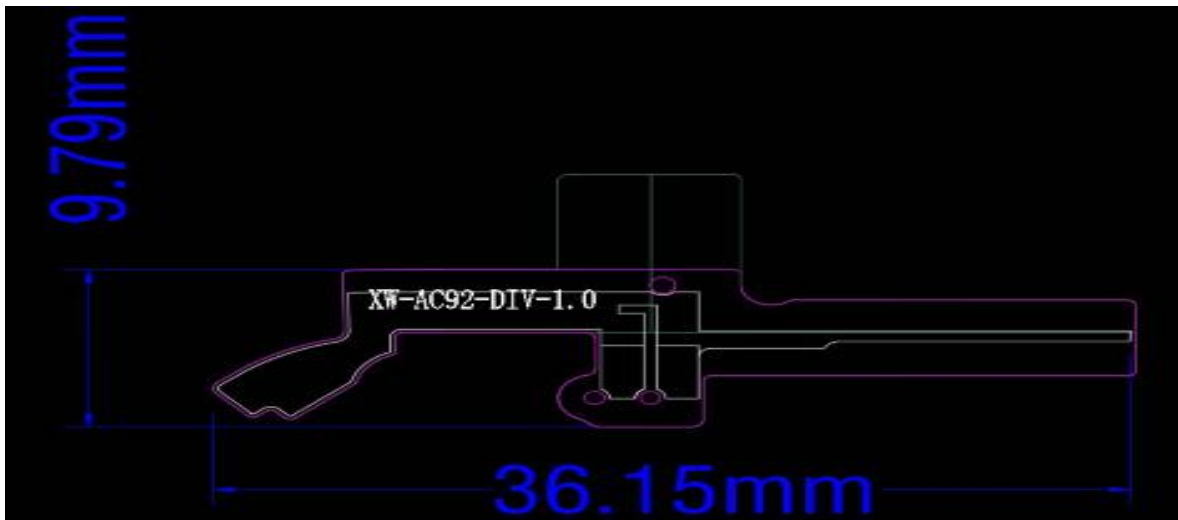
Frequency	1570MHZ	2450MHZ
Efficiency	-35.3%	-38.2%

# 3-1、 Antenna size diagram

Main antenna



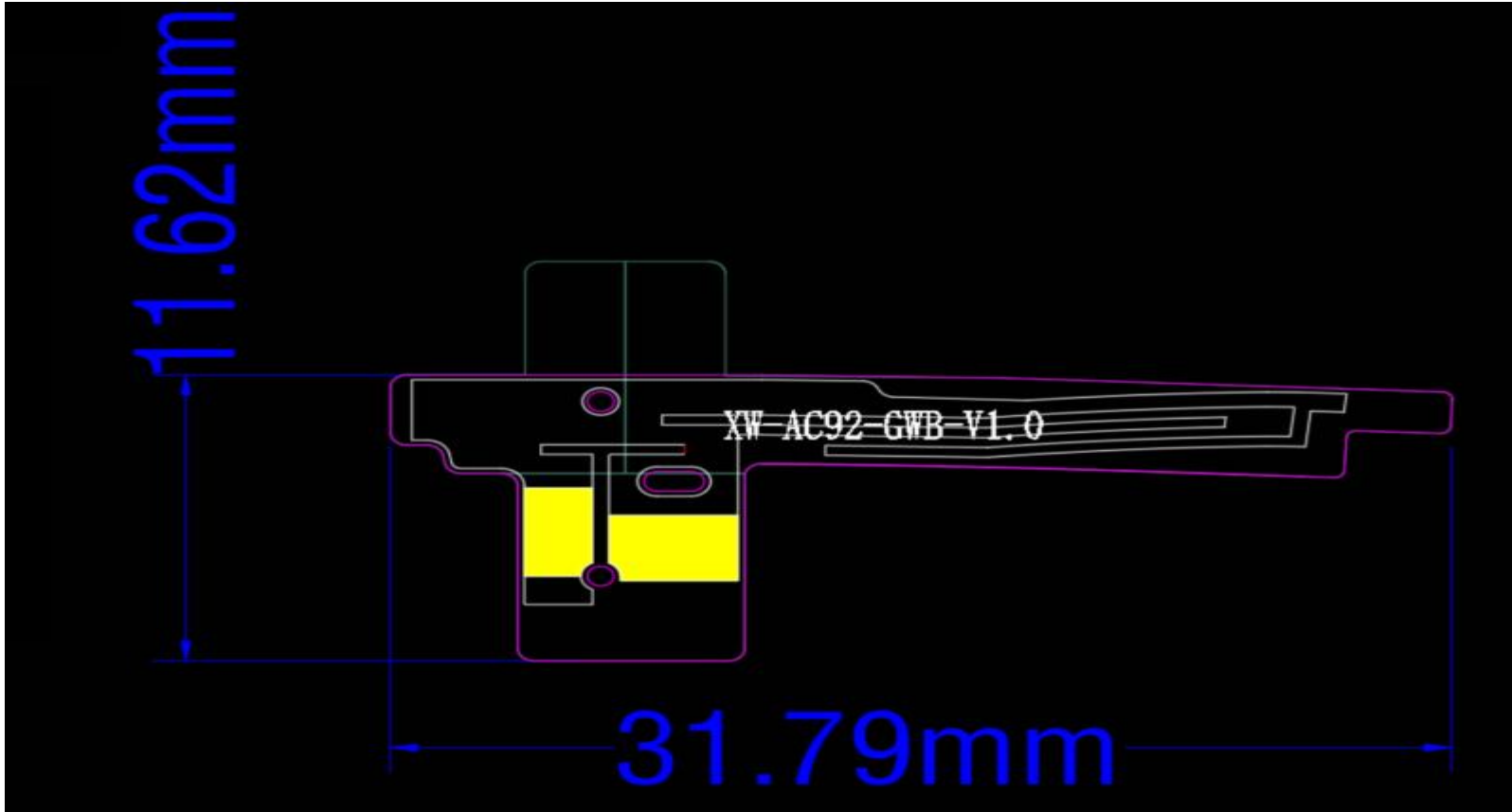
Diversity Antenna





## 3-2、 Antenna size diagram

GPS/WIFI/BT antenna



## 4 、 Contact information

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