

# Antenna Test Report

## Index:

1. Overview
2. Revision History
3. Test Item & Equipment
4. Matching Circuit
5. S Parameter Test
6. Active Test
7. Conducted Emission Test
8. Environmental Processing

Project Name:

Author: YangYongCheng

Update: 2023-07-20

# OverView

CUSTOMER NAME		PROJECT NAME	
<b>Items</b>		<b>Details</b>	
• FREQUENCY		2400MHz-2500MHz;5100MHz-5900MHz	
• PROJECT TYPE			
• ANTENNA SPACE			
• FEED & GROUND PAD			
• SENSITIVE ELEMENTS			
• ANTENNA TYPE			
• PCB			
• OTHERS			

# Revision History

Date	Revision	Author	Description of changes
20230719	A	YangYongCheng	Passive Antenna Test

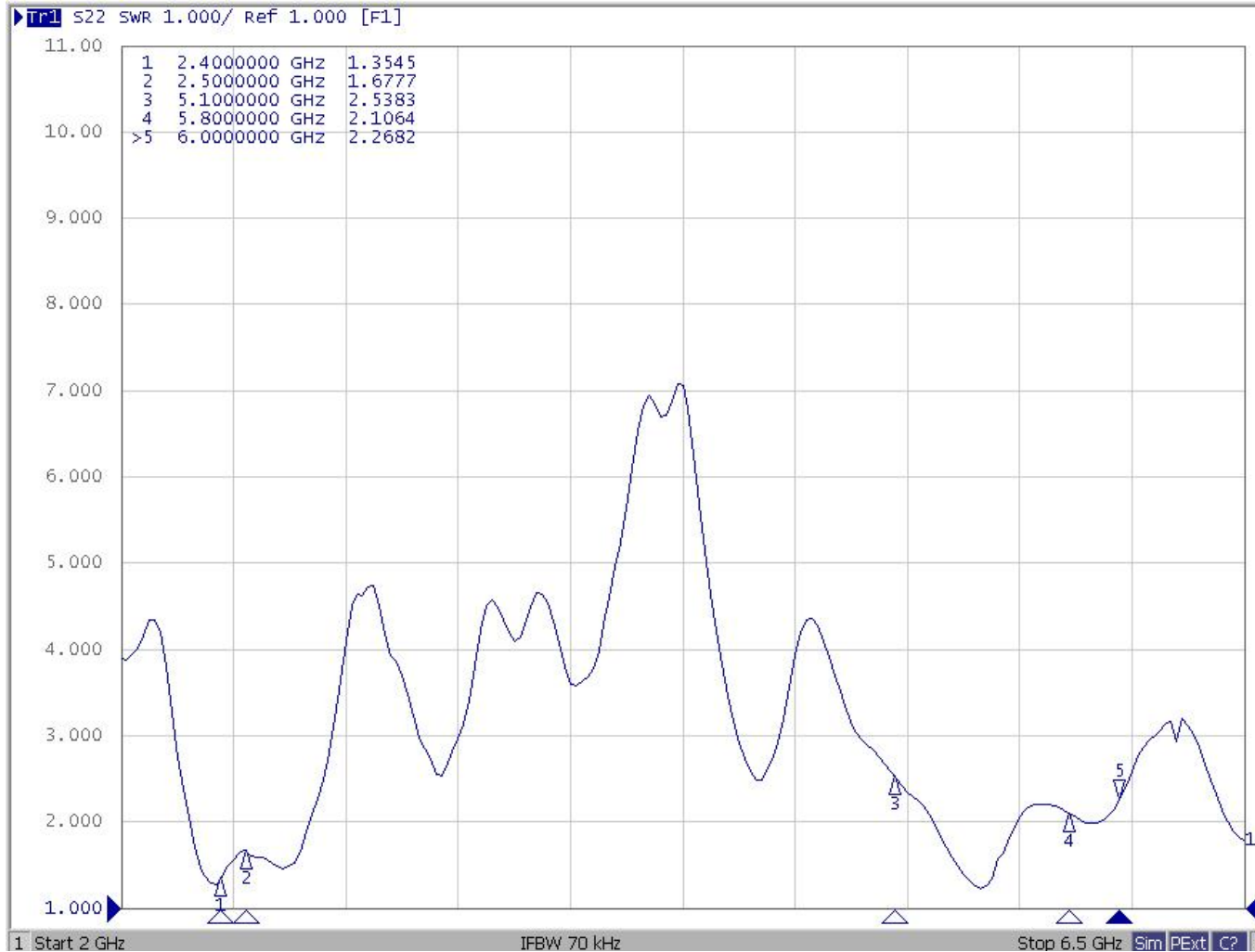
# Test Item & Equipment

List	Test Item	Equipment	
1.S Parameter	VSWR, Return Loss	Agilent VNA	
2.Active Test	TRP, TIS	Agilent 8960	RayZone1800
3.Passive Test	Gain, Efficiency, Pattern	Agilent E5071C	



# VSWR

## Main Antenna

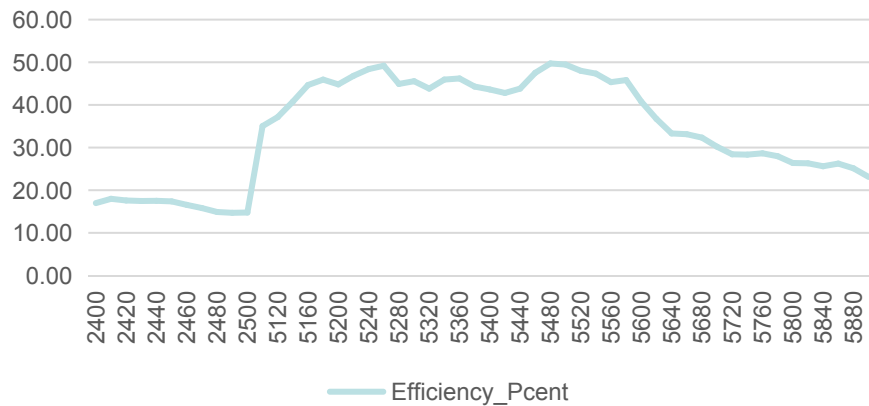


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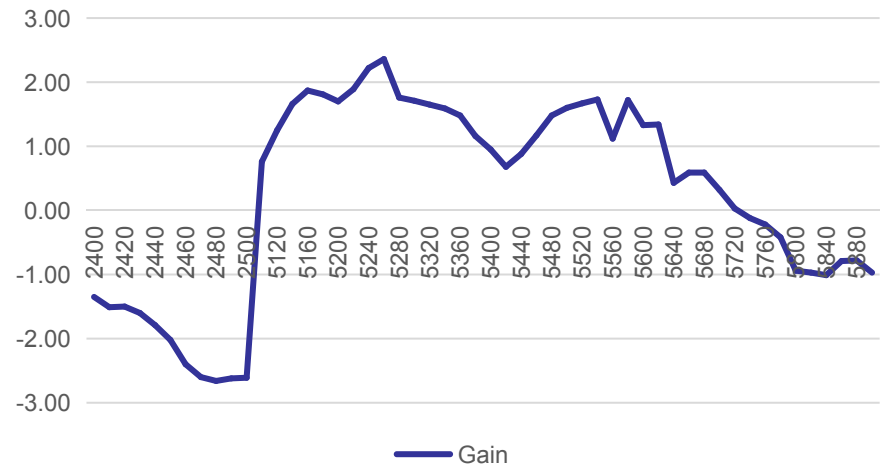
# Passive Antenna Test

## Main Antenna

Efficiency\_Pcent



Gain



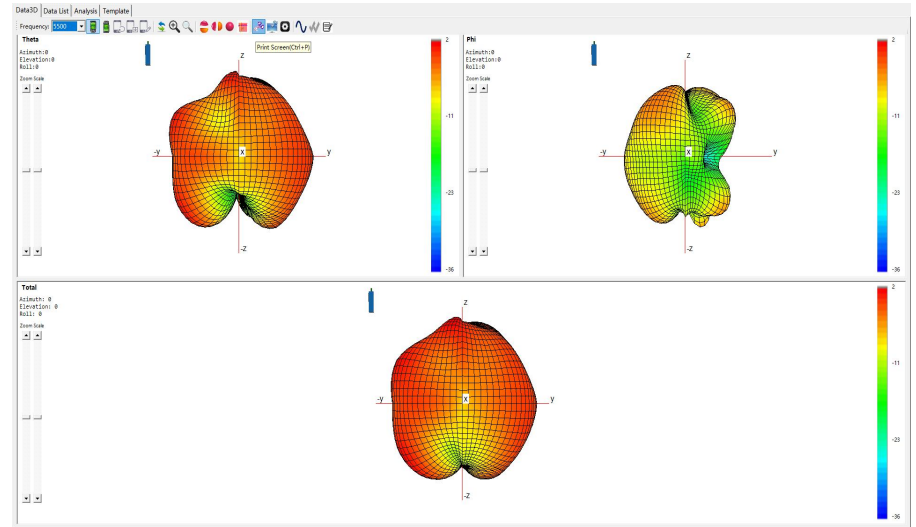
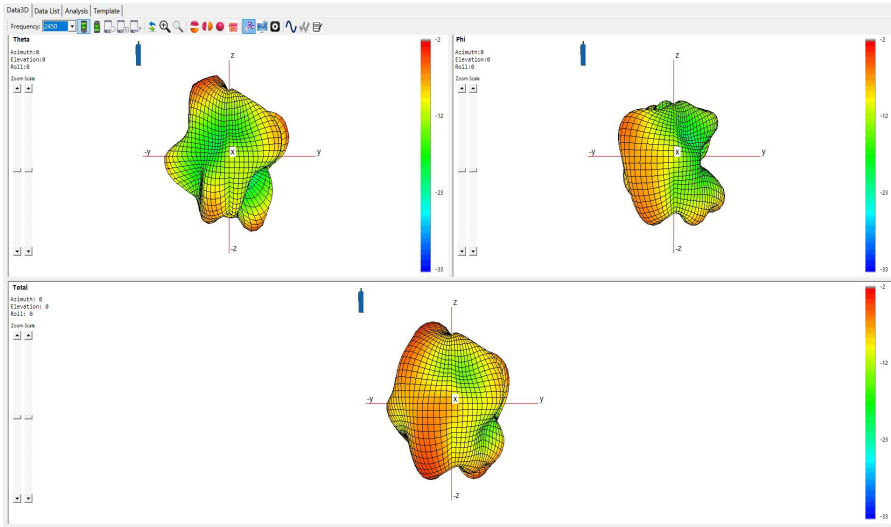


# 3D Antenna Radiation Pattern

## Main Antenna

2.4G

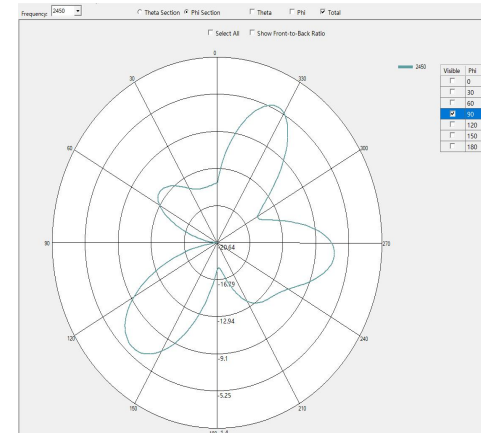
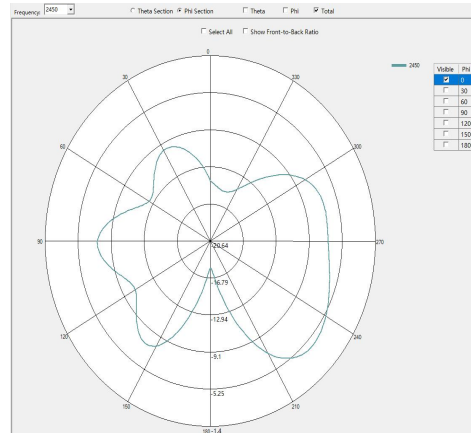
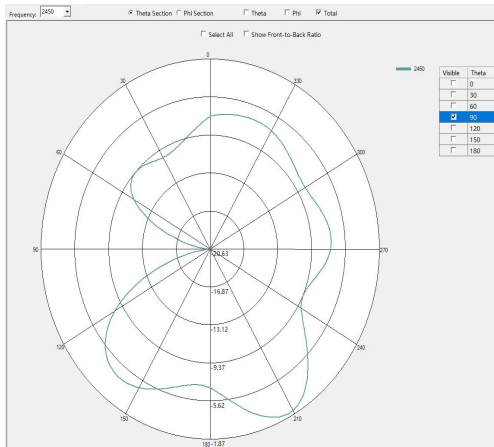
5.8G



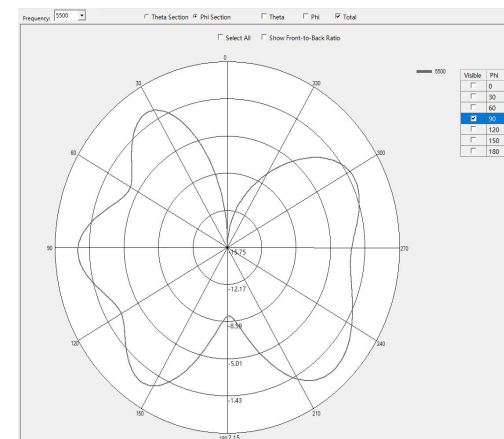
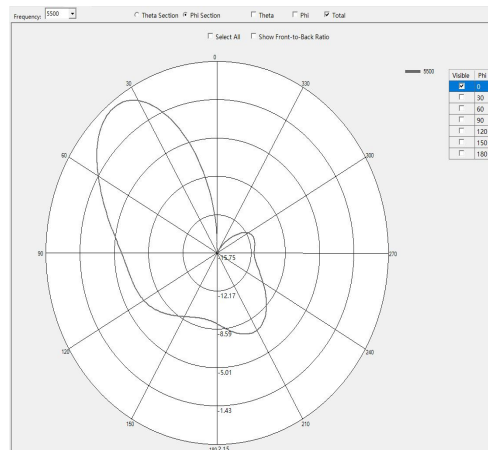
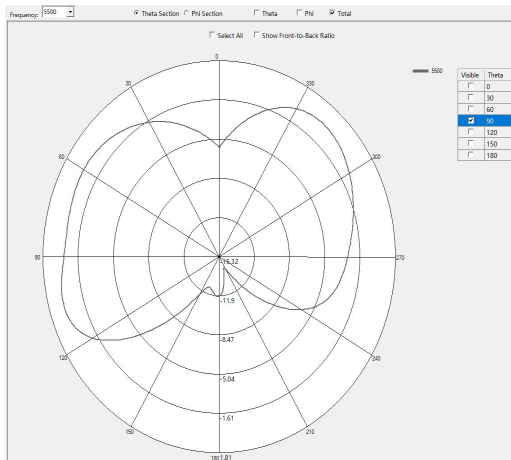


# 2D Antenna Radiation Pattern

## Main Antenna 2.4G

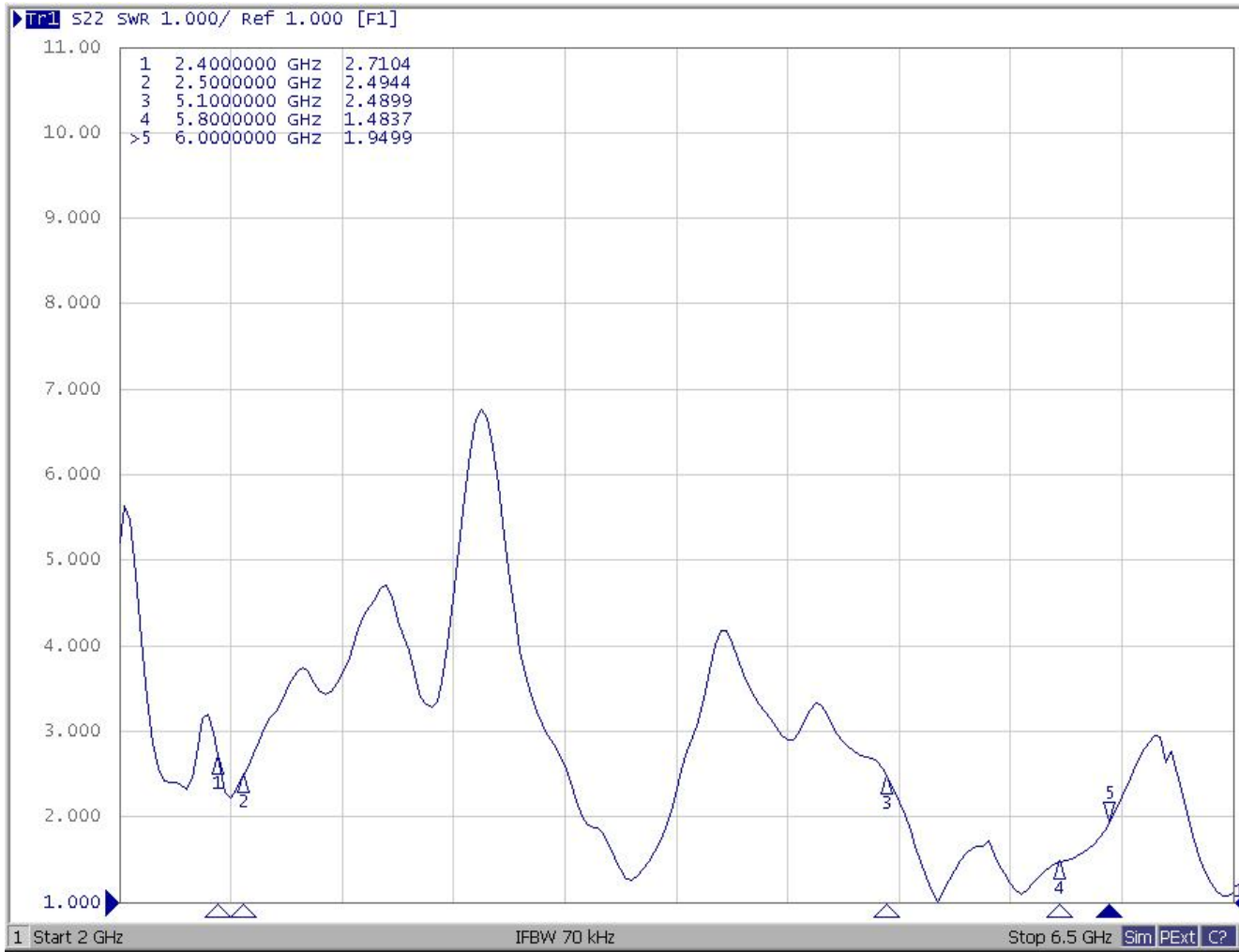


## 5.8G



# VSWR

## Aux Antenna



2023-7-20

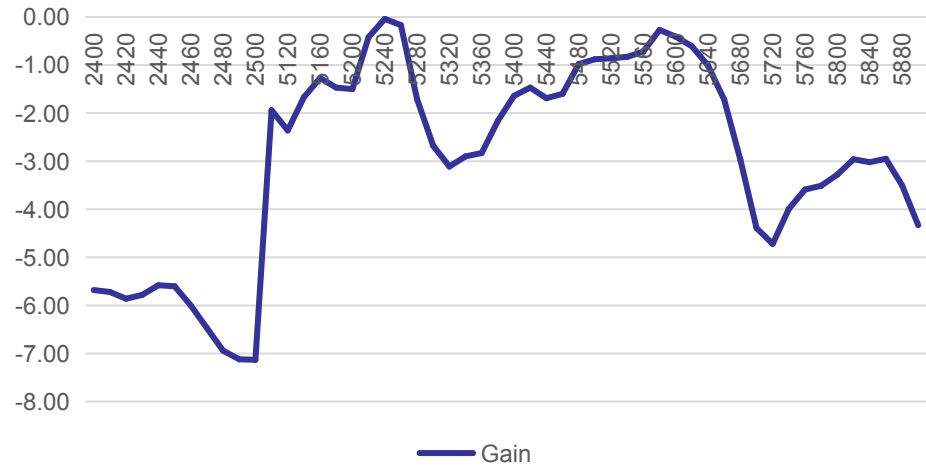
# Passive Antenna Test

Aux Antenna

Efficiency\_Pcent



Gain



Freq	Efficiency (%)	Gain (dBi)	Freq	Efficiency (%)	Gain (dBi)	Freq	Efficiency (%)	Gain (dBi)	Freq	Efficiency (%)	Gain (dBi)
2400	8.83	-5.68	5100	18.15	-1.94	5380	19.29	-2.16	5660	12.71	-1.72
2410	9.13	-5.72	5120	19.41	-2.36	5400	19.42	-1.64	5680	12.54	-2.97
2420	8.93	-5.86	5140	20.86	-1.67	5420	18.98	-1.47	5700	11.91	-4.39
2430	8.93	-5.78	5160	22.17	-1.27	5440	19.03	-1.69	5720	11.25	-4.72
2440	8.96	-5.58	5180	21.86	-1.47	5460	19.68	-1.60	5740	11.50	-3.99
2450	8.85	-5.60	5200	20.41	-1.50	5480	19.18	-0.98	5760	11.96	-3.59
2460	8.31	-6.00	5220	20.96	-0.42	5500	18.42	-0.88	5780	12.16	-3.51
2470	7.62	-6.47	5240	21.59	-0.04	5520	17.89	-0.86	5800	12.01	-3.28
2480	6.85	-6.94	5260	21.99	-0.17	5540	16.93	-0.83	5820	12.21	-2.96
2490	6.48	-7.12	5280	19.42	-1.71	5560	16.56	-0.72	5840	12.01	-3.02
2500	6.35	-7.13	5300	19.09	-2.68	5580	17.26	-0.27	5860	12.65	-2.95
			5320	18.33	-3.11	5600	15.58	-0.41	5880	12.50	-3.50
			5340	19.30	-2.90	5620	13.98	-0.61	5900	11.70	-4.33
			5360	19.40	-2.83	5640	12.91	-1.01			
				TEST Frequency (M hz)	Gain test Value (dBi)	Efficiency test value (%)					
				2400-2490	-5.58	8.96					
				5120-5870	-0.04	21.59					

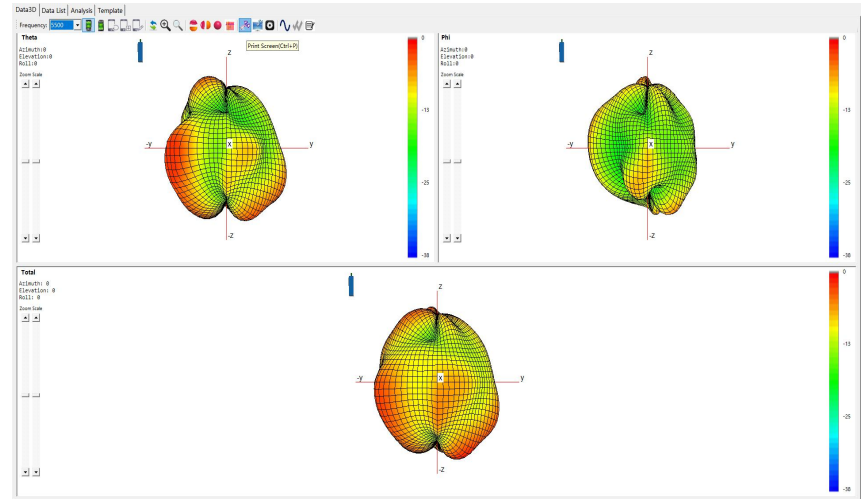
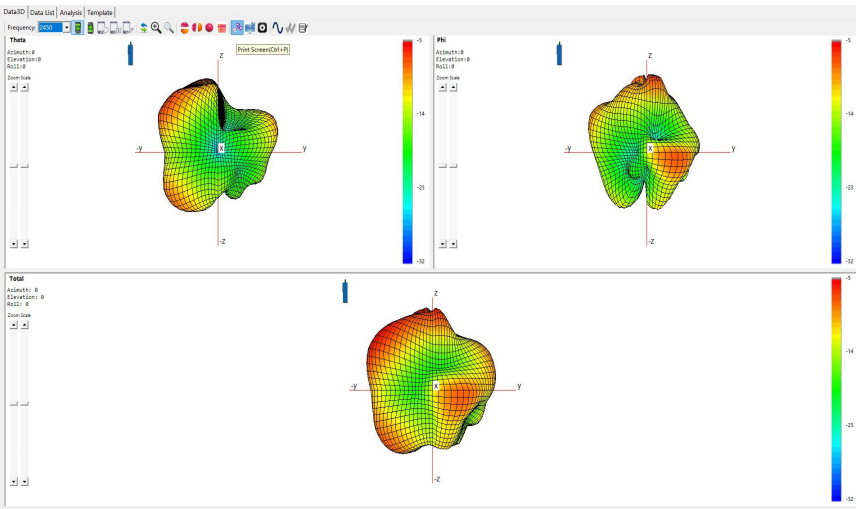
2023-7-20

# 3D Antenna Radiation Pattern

## Aux Antenna

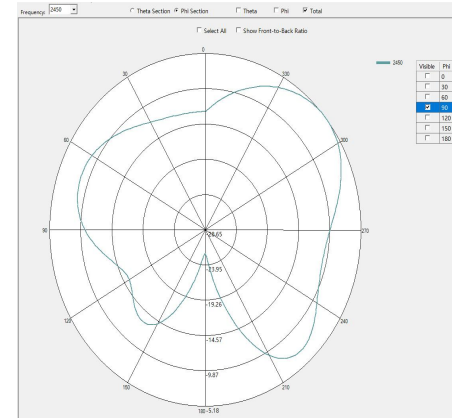
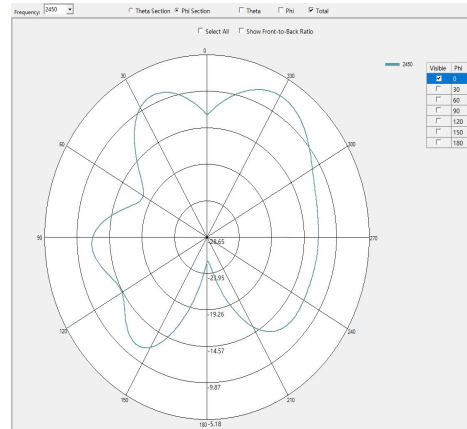
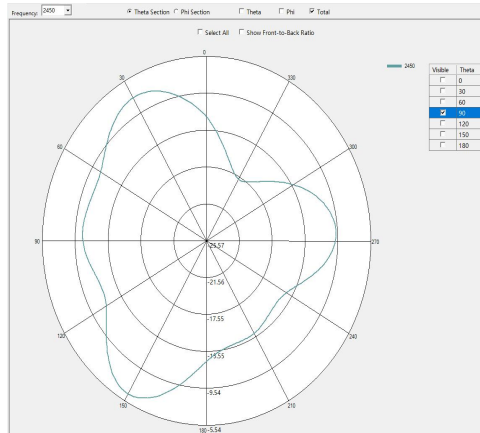
2.4G

5.8G

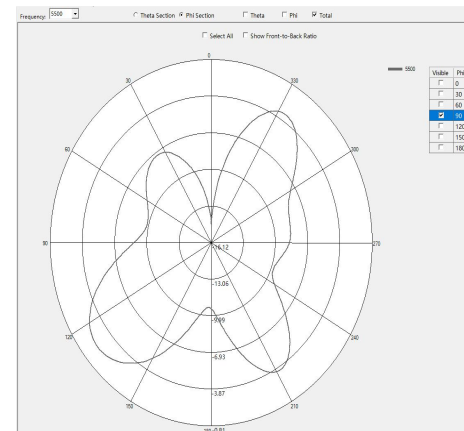
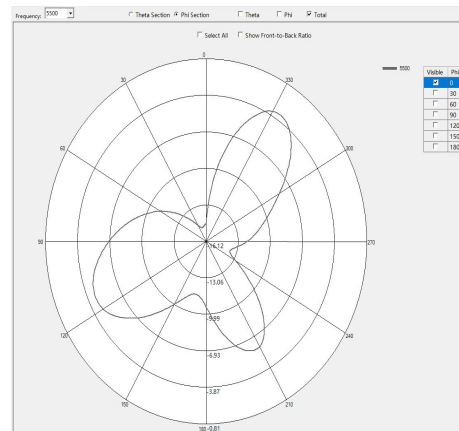
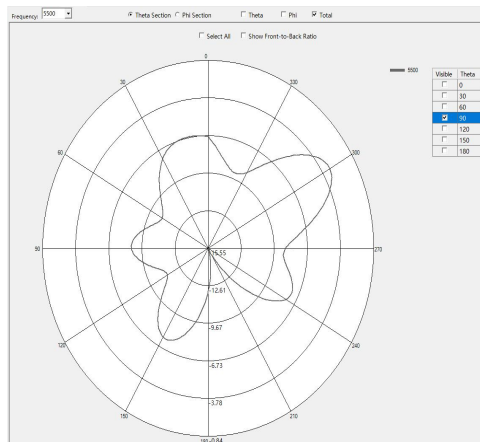


# 2D Antenna Radiation Pattern

## Aux Antenna 2.4G



## 5.8G



# Engineering drawing

