

[SSVD] WOC Antenna

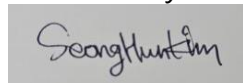
INPAQ Technology Co., Ltd.
Last updated in 2024.12.9

Content Details

- TEST Condition
- TEST PCB
- Matching Value
- VSWR & Smith Chart / 3D Gain data
- 2D Radiation Pattern & Gain
- 3D Radiation pattern

TEST Condition

- WOC Metal Antenna and Chip Antenna
 - Test Chamber: Anechoic Chamber
(Address: #610, 102 DONG, 36, Bucheon-ro 198beon-gil, Bucheonsi, Gyeonggi-do 14557, Korea)
 - Network Analyzer: VSWR
 - 3D Passive Chamber: Gain, Efficiency and 2D&3D Pattern
 - Measured by Seong Hun Kim 2024/10/07



- Test Environment please refer to Antenna appendix A

Test Procedure

Test Step Flow

1. Maintain the test ambient temperature of 23 C, the instrument is powered on and preheated for more than 30 minutes
2. Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard
3. Outline sets the test content objectives and conducts calibration tests
4. Run the EMQuest OTA software, the test is complete, export the corresponding test diagram and test data, and save to the corresponding directory

Item	Measuring Instruments	Latest Calibration Schedule
1	Anechoic Chamber	2024-10-07
2	Network Analyzer Agilent 5071BENA	2023-10-24

TEST PCB

Please refer to Antenna appendix A

Matching Value

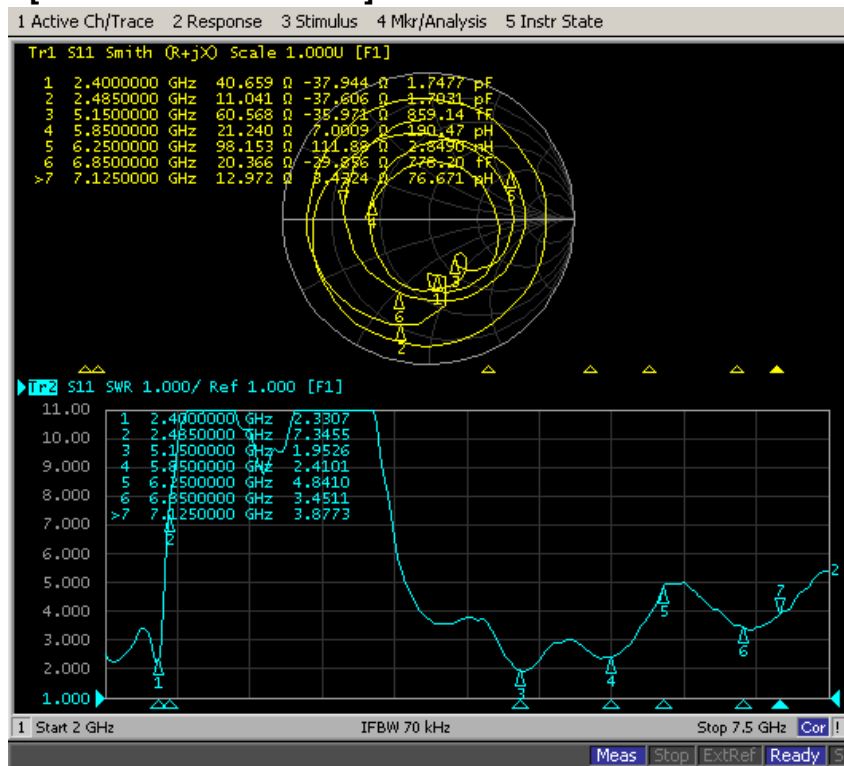
Please refer to Antenna appendix A

Matching Value

Ant#0

VSWR & Smith Chart / 3D Gain data_Ant #0

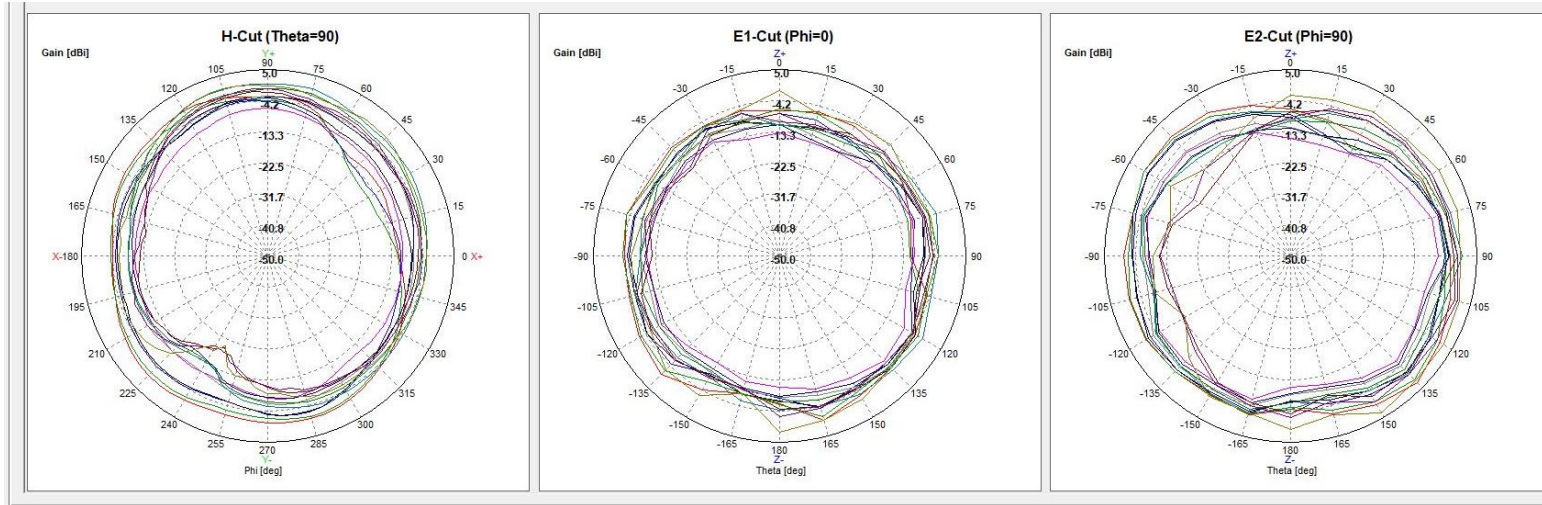
[Smith Chart & VSWR]



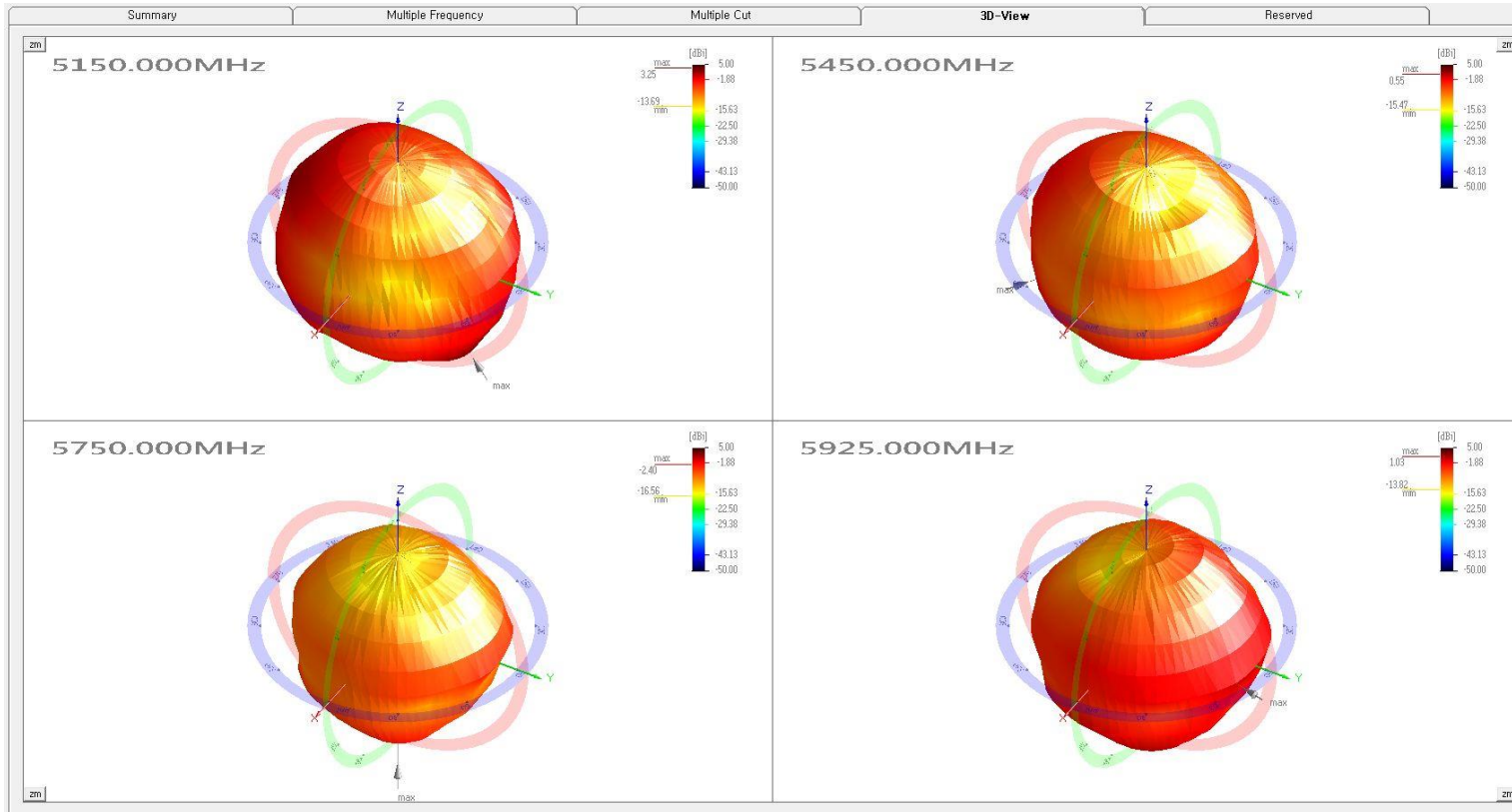
[3D Gain data]

Freq.[MHz]	Eff.[%]	Avg.[dBi]	Peak[dBi]
5150	55.51	-2.56	1.39
5250	46.15	-3.36	1.21
5350	30.62	-5.14	0.97
5450	31.11	-5.07	0.55
5550	12.09	-9.18	-3.46
5650	21.41	-6.69	-1.61
5750	17.72	-7.51	-2.4
5850	27.82	-5.56	-0.36
5925	39.41	-4.04	1.12
6425	25.68	-5.9	0.88
6525	30.54	-5.15	0.95
6875	54.25	-2.66	1.42
7125	32.8	-4.84	1.05

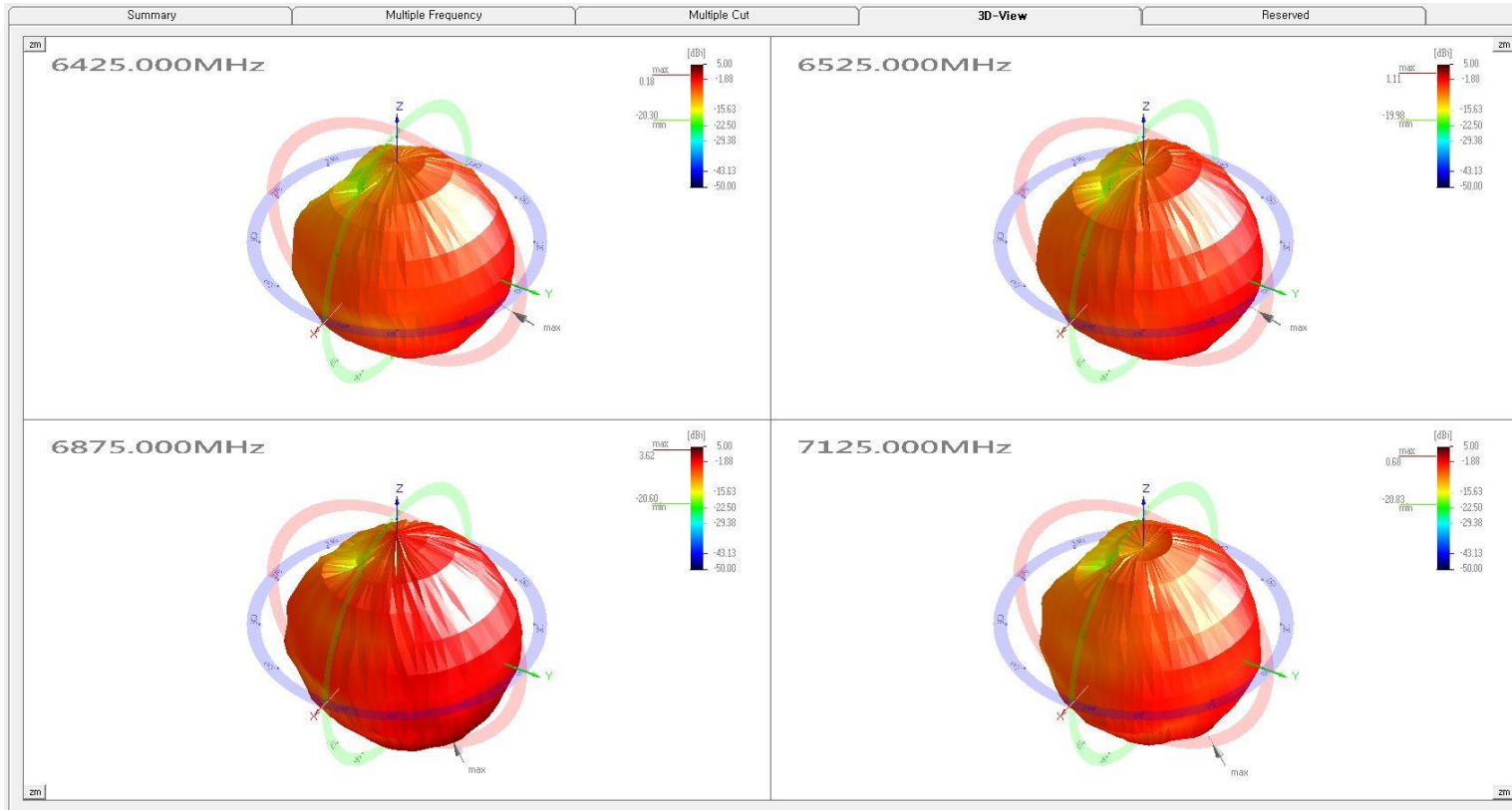
2D Radiation Pattern & Gain_Ant#0



3D Radiation pattern_Ant#0



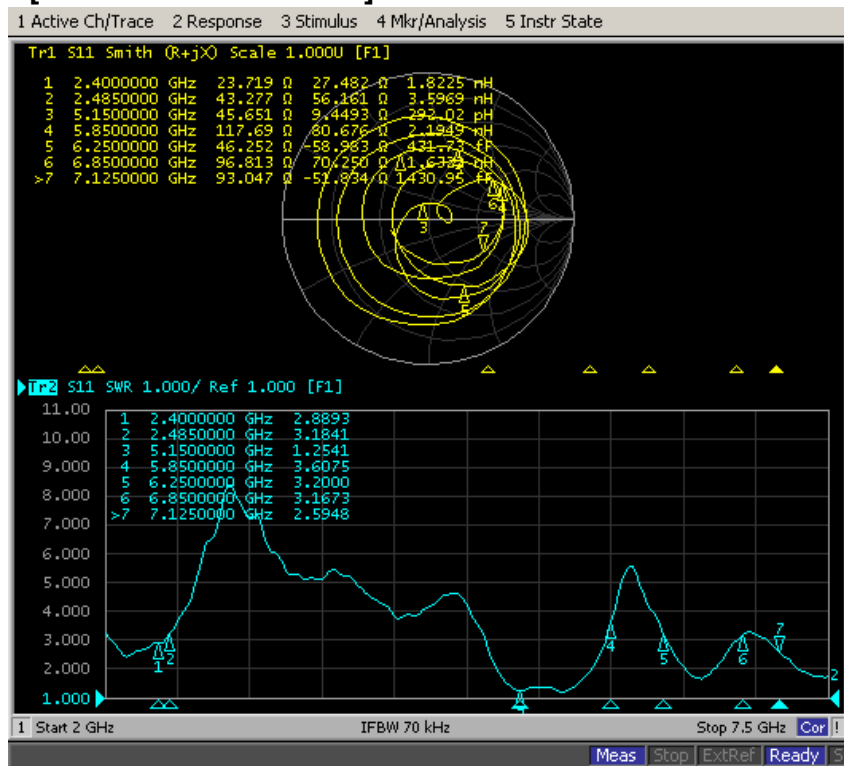
3D Radiation pattern_Ant#0



Ant#1

VSWR & Smith Chart / 3D Gain data_Ant #1

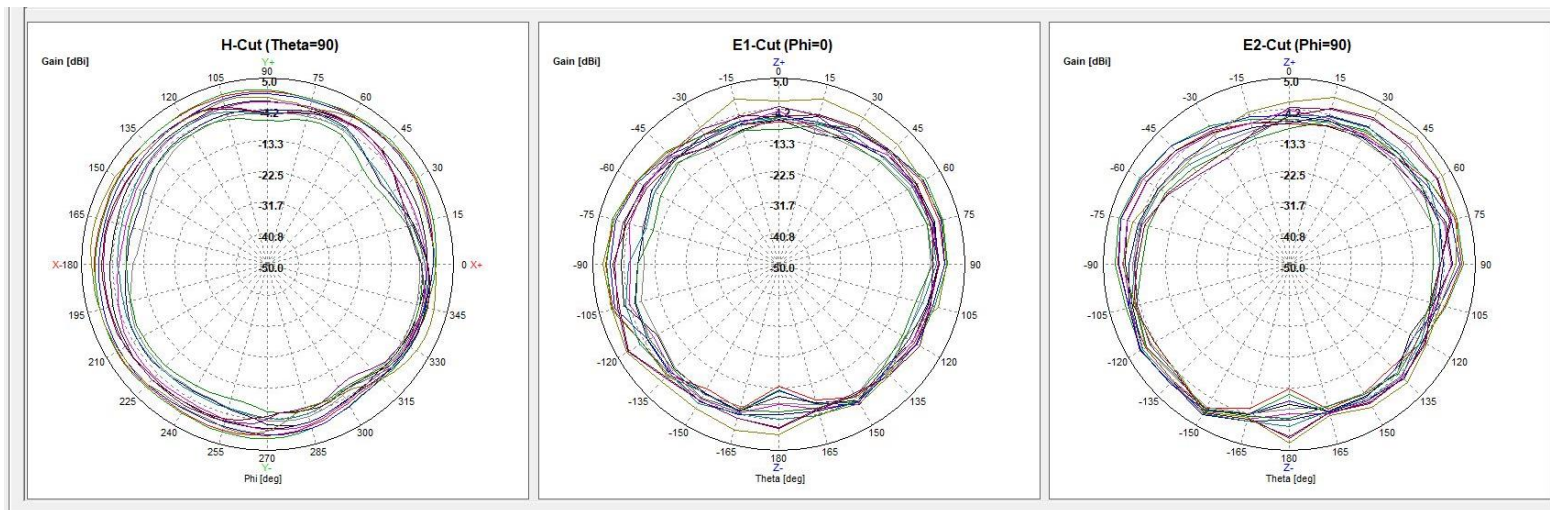
[Smith Chart & VSWR]



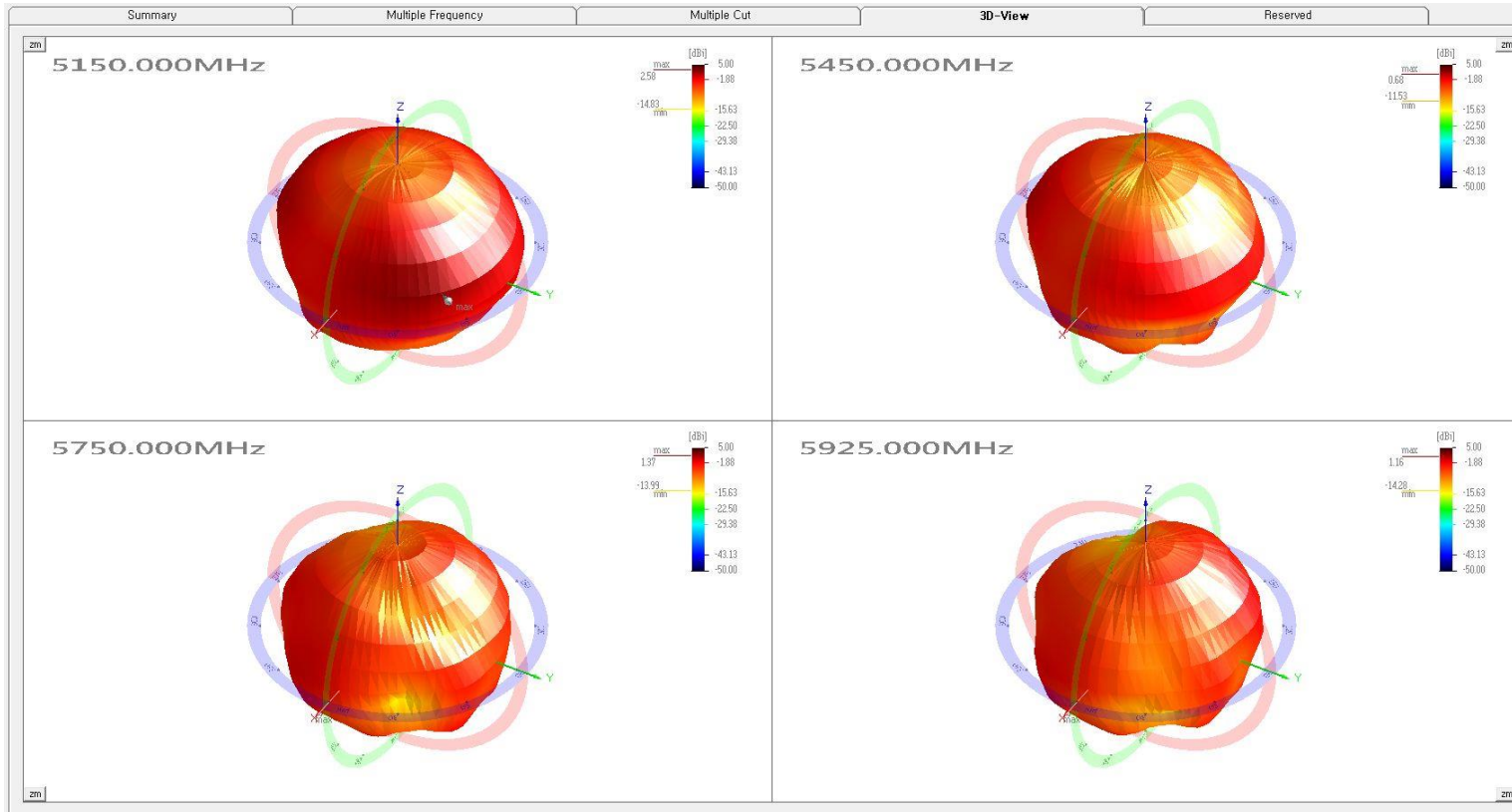
[3D Gain data]

Freq.[MHz]	Eff.[%]	Avg.[dBi]	Peak[dBi]
5150	67.57	-1.7	1.25
5250	76.6	-1.16	1.34
5350	63.98	-1.94	1.1
5450	42.89	-3.68	0.68
5550	43.7	-3.6	0.71
5650	25	-6.02	-1.02
5750	38.34	-4.16	0.8
5850	24.9	-6.04	-0.55
5925	37.63	-4.25	0.76
6425	51.61	-2.87	1.01
6525	51.28	-2.9	0.98
6875	83.97	-0.76	1.52
7125	51.11	-2.92	0.97

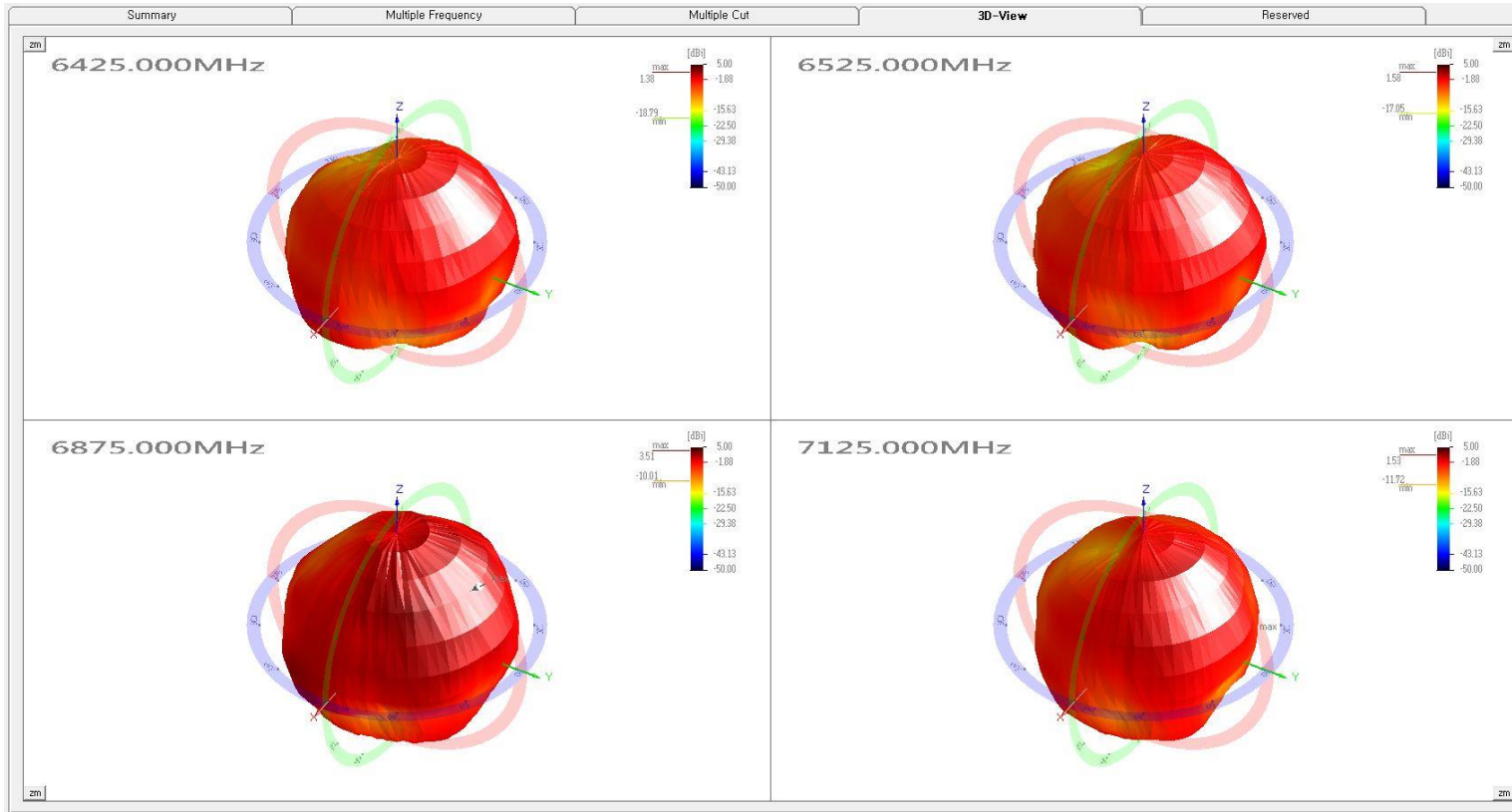
2D Radiation Pattern & Gain_Ant#1



3D Radiation pattern_Ant#1



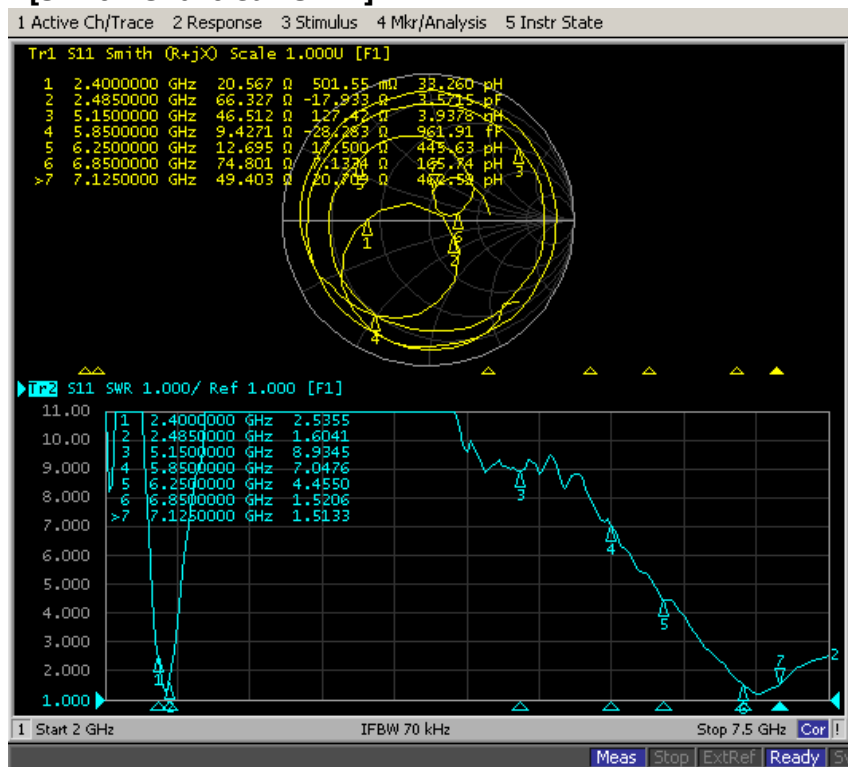
3D Radiation pattern_Ant#1



Ant#2

VSWR & Smith Chart / 3D Gain data_Ant #2

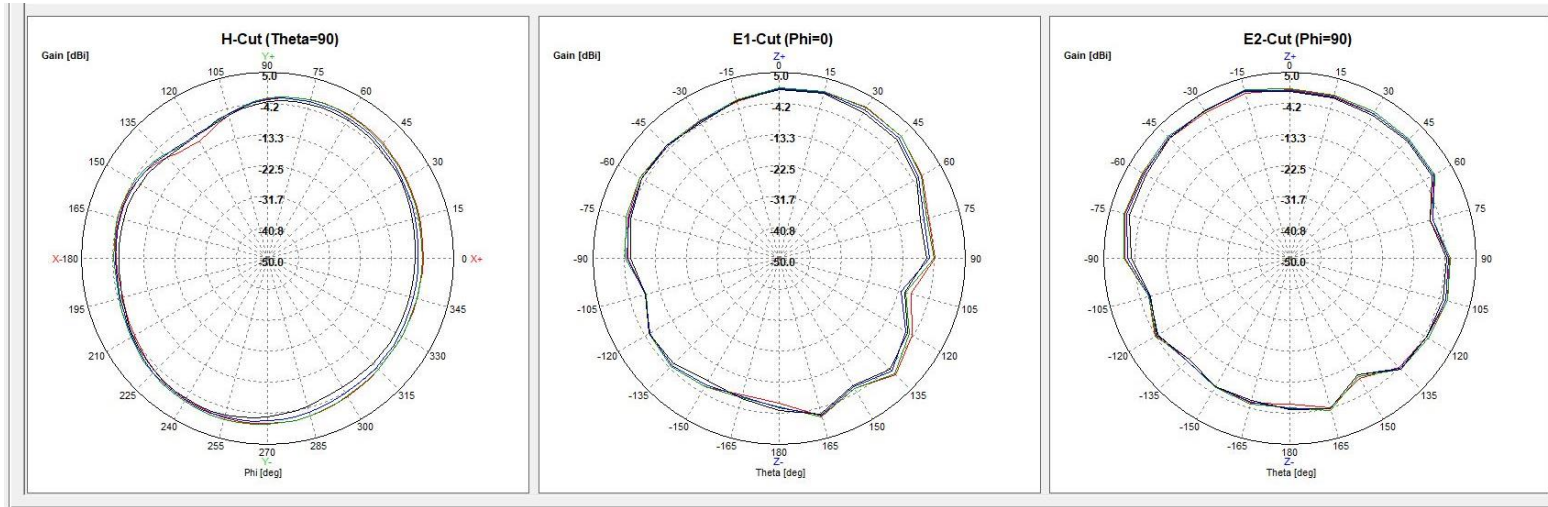
[Smith Chart & VSWR]



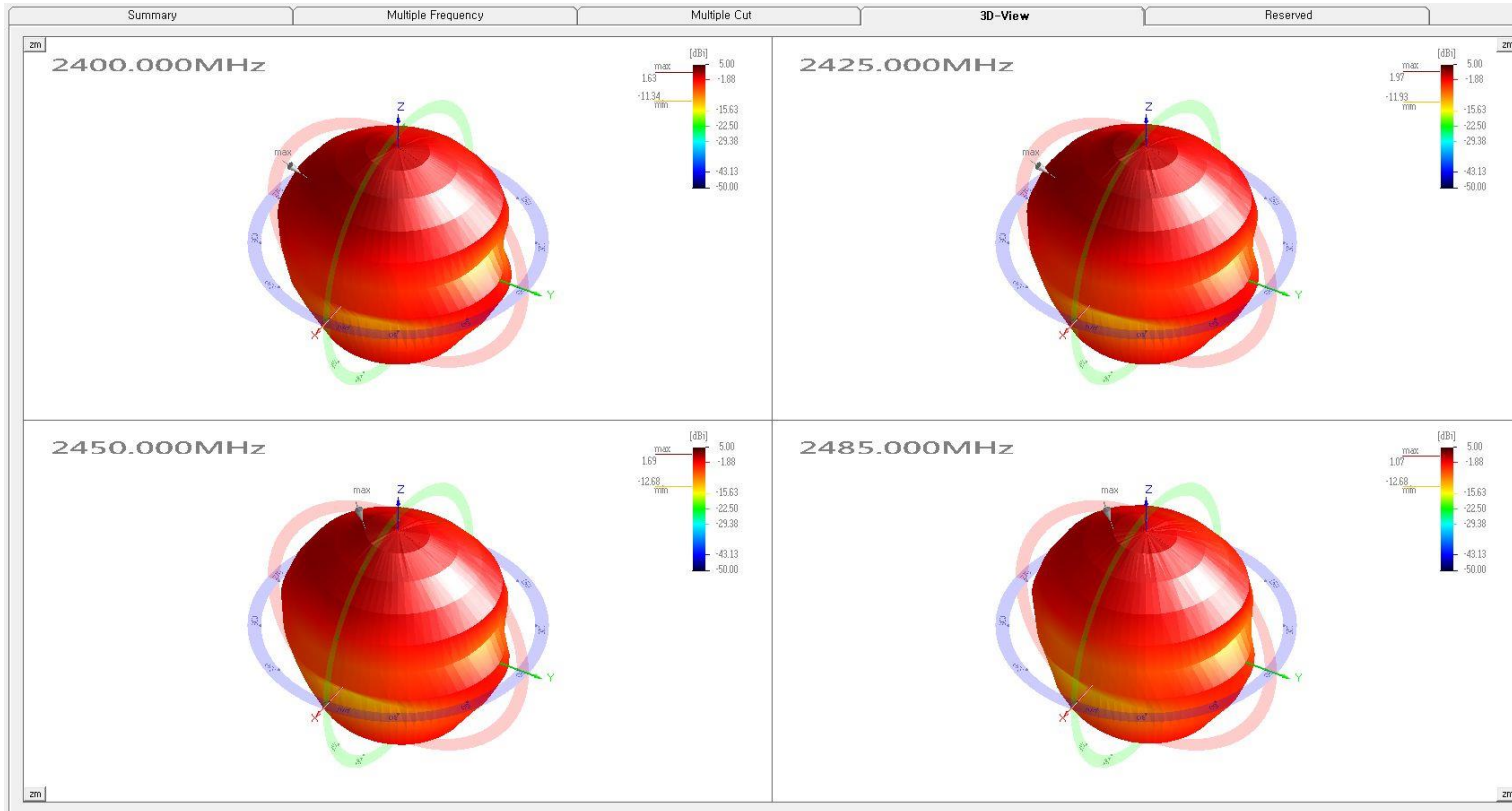
[3D Gain data]

Freq.[MHz]	Eff.[%]	Avg.[dBi]	Peak[dBi]
2400	54.13	-2.67	1.63
2425	56.62	-2.47	1.97
2450	48.94	-3.1	1.69
2485	43.62	-3.6	1.07

2D Radiation Pattern & Gain_Ant#2



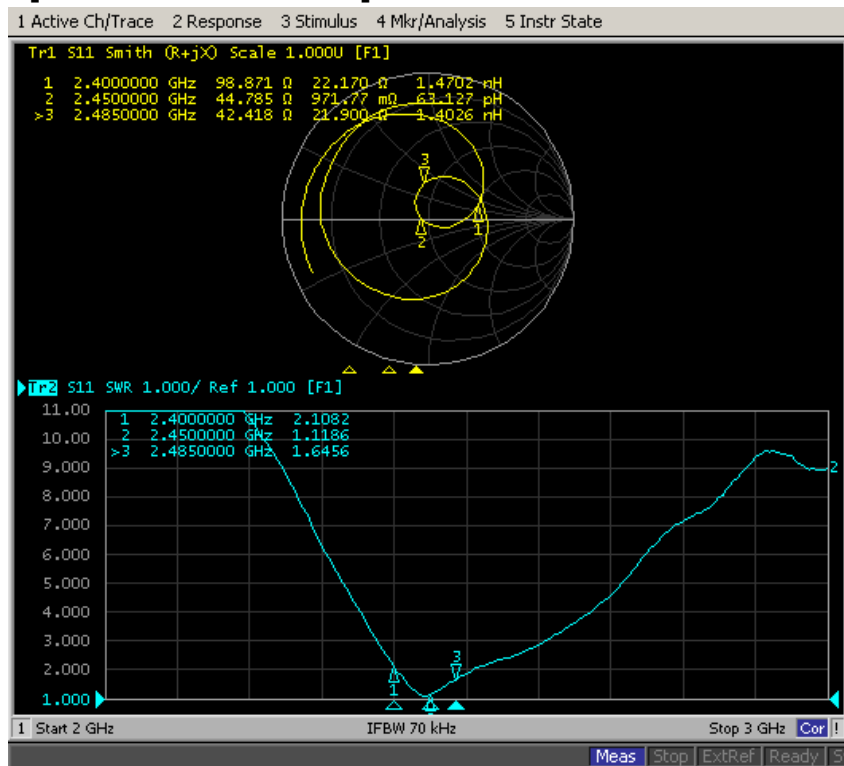
3D Radiation pattern_Ant#2



BT

VSWR & Smith Chart / 3D Gain data_BT

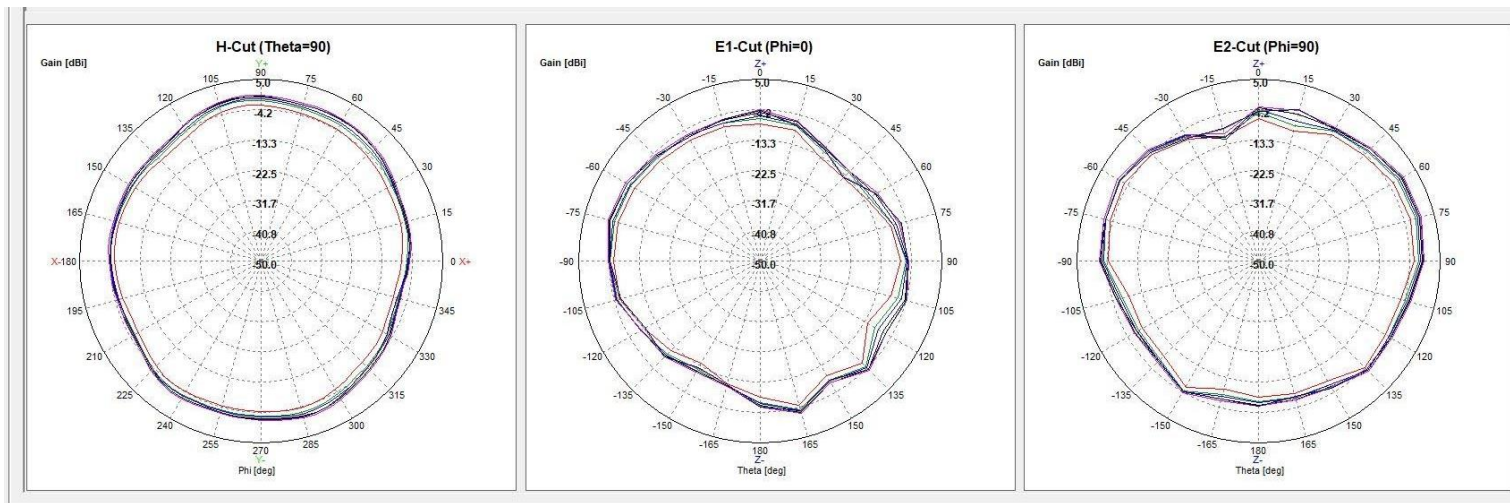
[Smith Chart & VSWR]



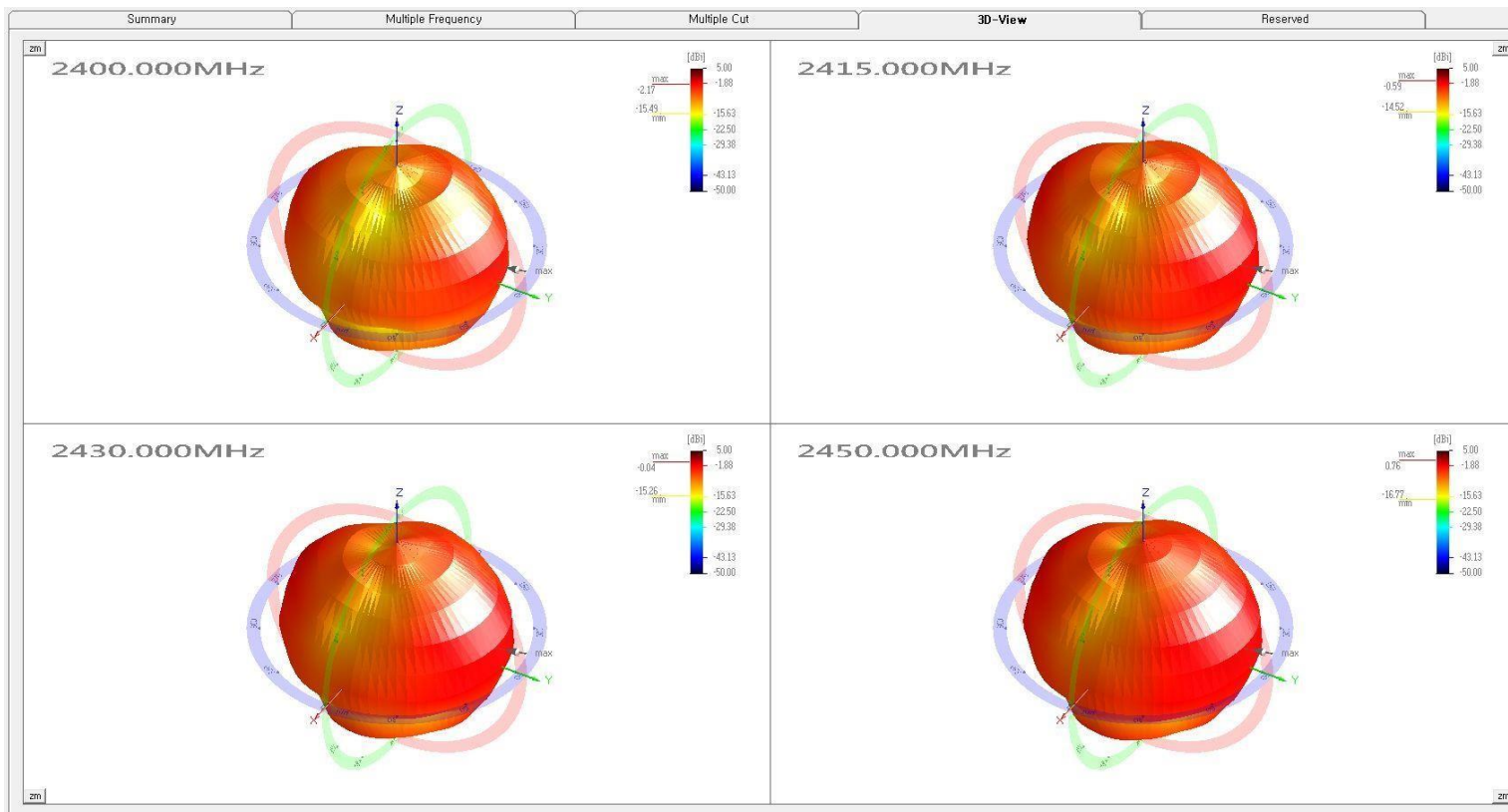
[3D Gain data]

Freq.[MHz]	Eff.[%]	Avg.[dBi]	Peak[dBi]
2400	21.85	-6.61	-2.17
2415	30.1	-5.21	-0.59
2430	33.25	-4.78	-0.04
2450	38.66	-4.13	0.76
2460	42	-3.77	1.2
2480	37.77	-4.23	0.71
2485	36.85	-4.34	0.58

2D Radiation Pattern & Gain_BT



3D Radiation pattern_BT



Thank you

本資料均屬機密，僅供指定之收件人使用，未經寄件人許可不得揭露、複製或散佈本信件。

This message and any attachments are confidential and may be legally privileged. Any unauthorized review, use or distribution by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please immediately notify the sender, completely delete this documents, and destroy all copies. Your cooperation will be highly appreciated.