

# APM7210D Antenna Report

2023/12/26

# Outline

- Measurement Information
- Antenna Peak Gain
- Antenna Pattern

# Measurement Information

- Antenna Vendor : INPAQ TECHNOLOGY CO., LTD.
- Test date : 2023/12/19
- Test Engineer : Calvin
- Address of test site : 566-1, Ko-Shi Road, Yang-Mei, Tao-Yuan, 32668, Taiwan
- Instrument : Keysight Network Analyzer

# Measurement Information

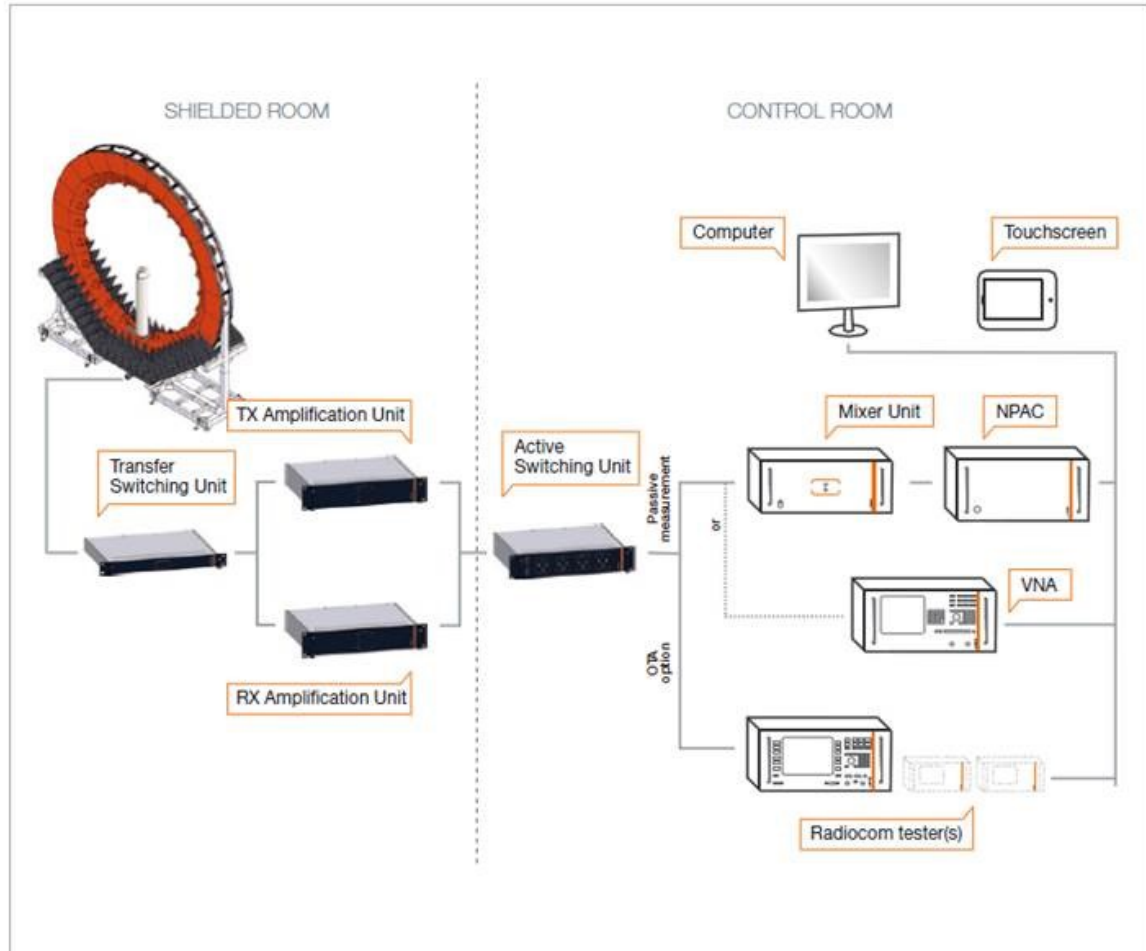
- Test instrument calibration information

<b>Vender</b>	<b>Model No.</b>	<b>Calibrated Date</b>	<b>Calibrated Until</b>
<b>Satimo</b>	<b>SG24</b>	<b>2022/11/30</b>	<b>2024/1/29</b>

# Measurement Information

## System overview

- Chamber : Satimo
- Test Program : SPM V15



# Measurement Information

- Experimental Setup

Operating instructions:

1. Place the DUT at the center of the turntable.
2. Connecting the test cable to the DUT , and use the SPM software for passive measurement.
3. During the measured process, SATIMO SG24 will conduct radiation testing with the DUT through 23 probes by a vertical 360-degree; then the turntable will rotate a horizontal 180-degree.
4. After a complete measurement of spherical 3D is completed.

# Measurement Information

- Antenna Solution Detail

	<b>Antenna Size (<math>mm^2</math>)</b>	<b>Type</b>	<b>Connector</b>
<b>ANT11</b>	<b>25*12.7</b>	<b>Dipole</b>	<b>IPEX Compatible ; Gold</b>
<b>ANT12</b>	<b>25*12.7</b>	<b>Dipole</b>	<b>IPEX Compatible ; Gold</b>
<b>ANT13</b>	<b>25*12.7</b>	<b>Dipole</b>	<b>IPEX Compatible ; Gold</b>
<b>ANT14</b>	<b>25*12.7</b>	<b>Dipole</b>	<b>IPEX Compatible ; Gold</b>

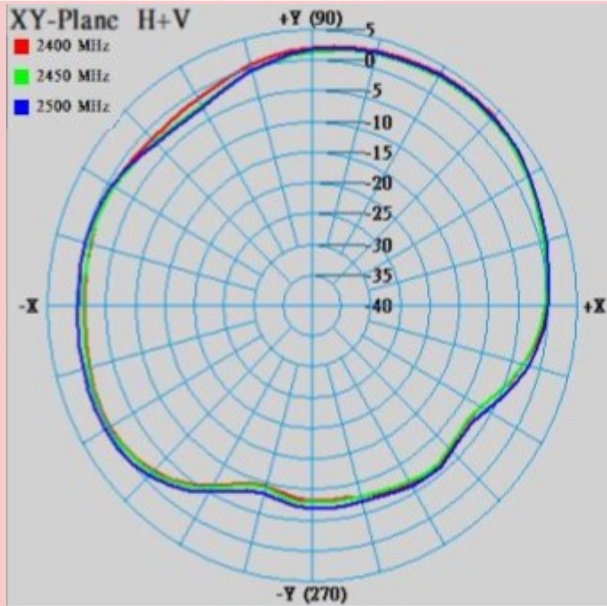
# Antenna Peak Gain

	ANT11	ANT12		ANT13	ANT14
Frequency(MHz)	Peak Gain(dBi)	Peak Gain(dBi)	Frequency(MHz)	Peak Gain(dBi)	Peak Gain(dBi)
2400	4.02	4.31	5150	4.19	4.54
2450	3.91	3.79	5500	4.45	3.95
2500	4.56	3.51	5850	4.18	4.76

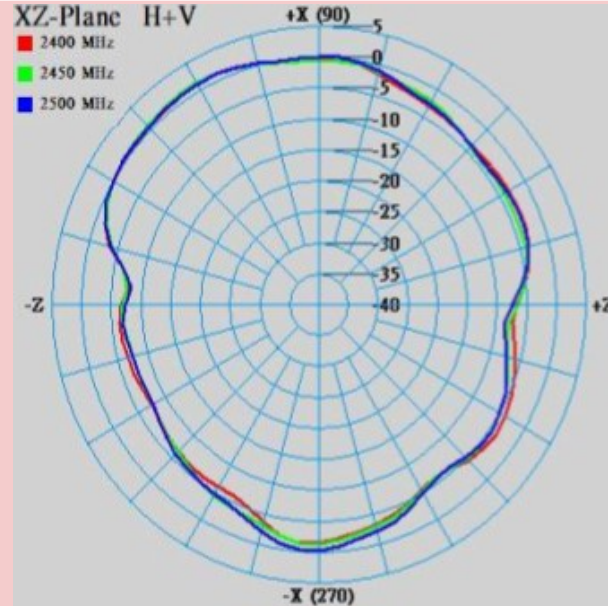


# Antenna Pattern – ANT11 (2400MHz, 2450MHz, 2500MHz)

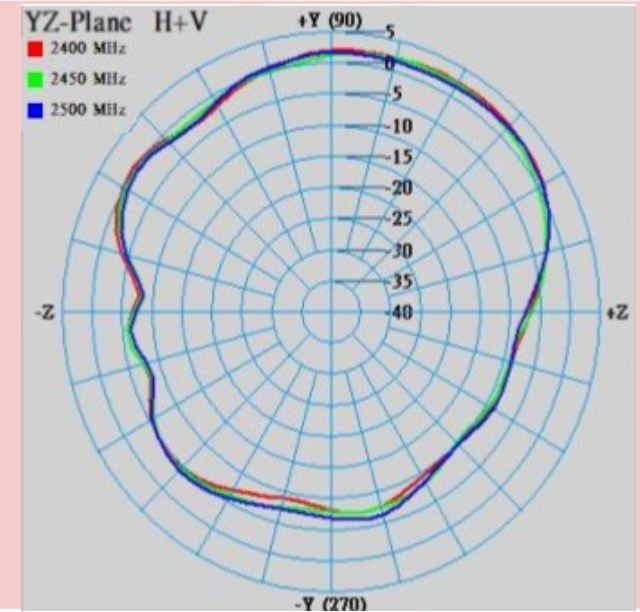
X-Y plane



X-Z plane

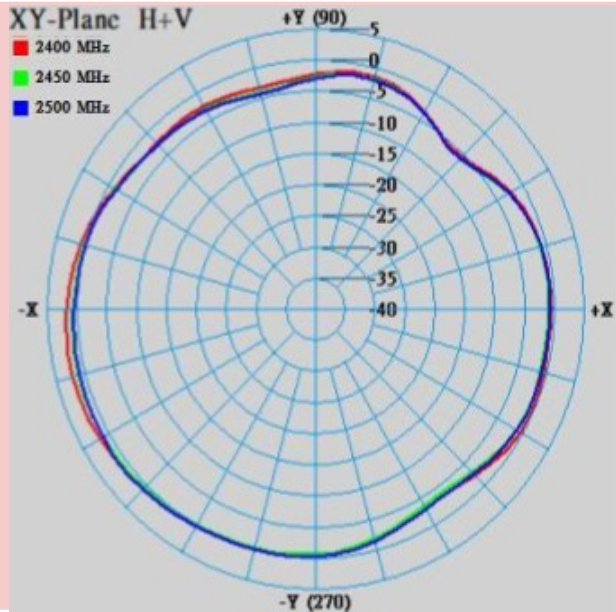


Y-Z plane

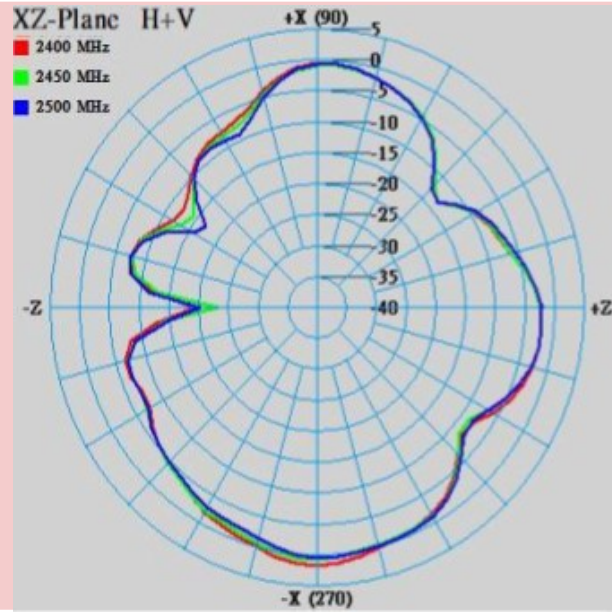


# Antenna Pattern – ANT12 (2400MHz, 2450MHz, 2500MHz)

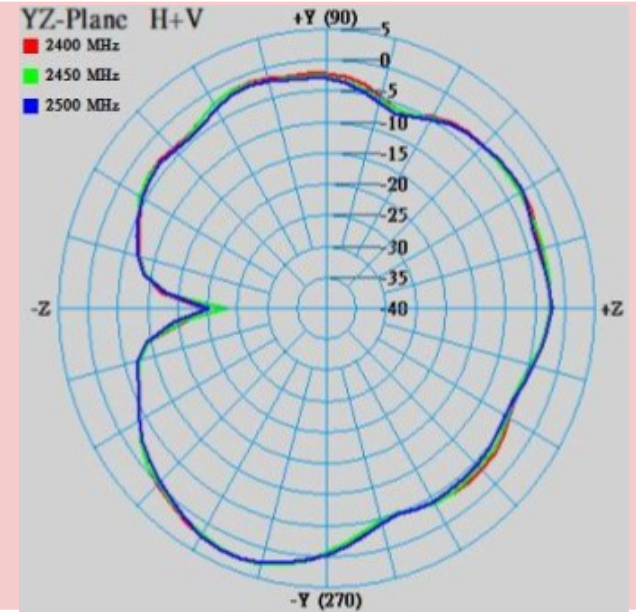
X-Y plane



X-Z plane

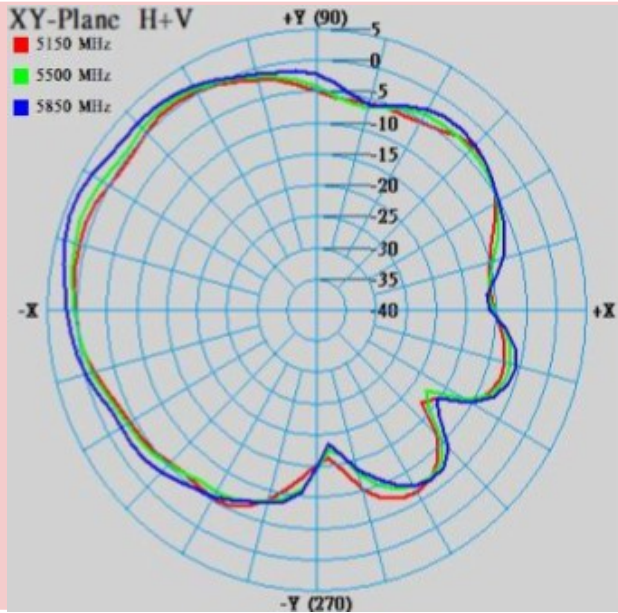


Y-Z plane

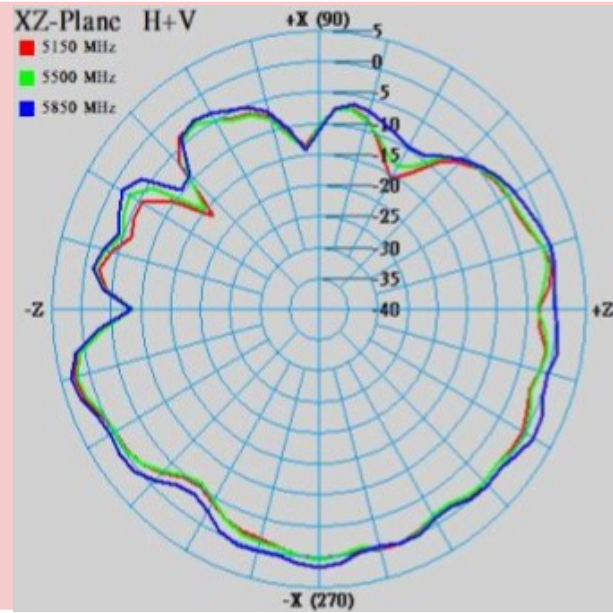


# Antenna Pattern – ANT13 (5150MHz, 5500MHz, 5850MHz)

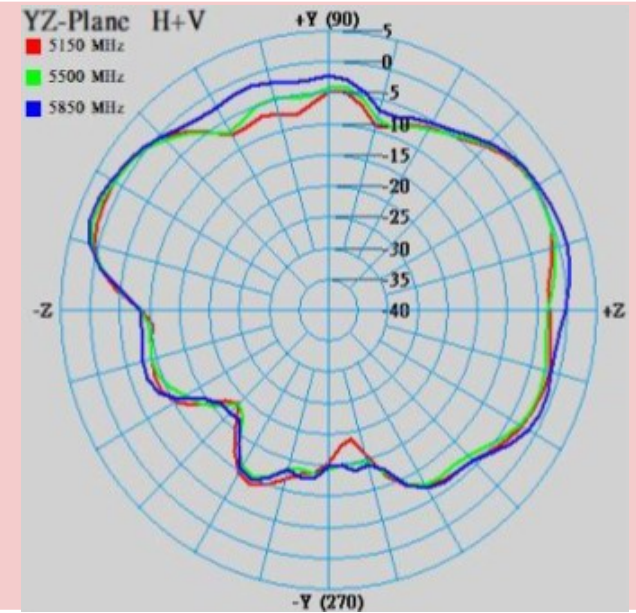
X-Y plane



X-Z plane

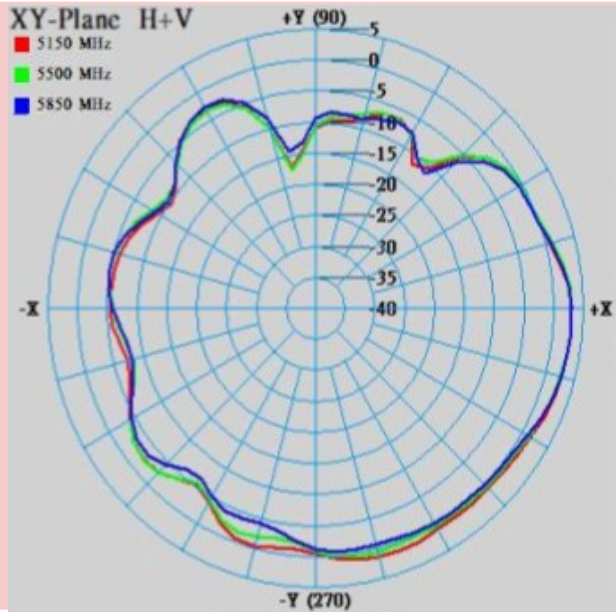


Y-Z plane

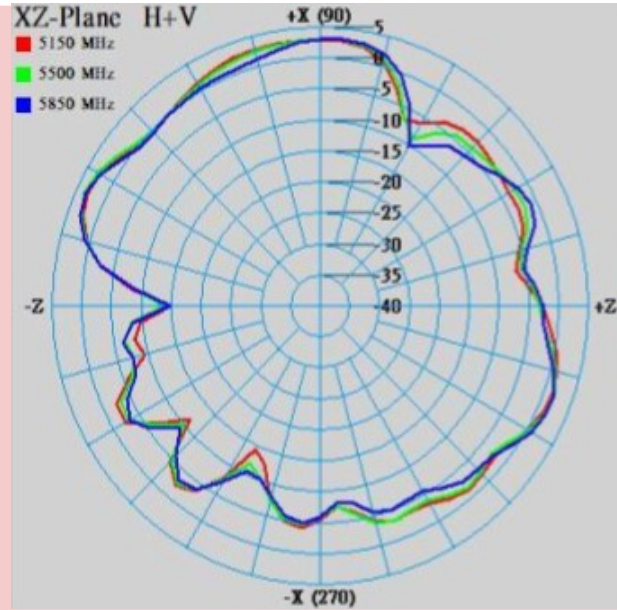


# Antenna Pattern – ANT14 (5150MHz, 5500MHz, 5850MHz)

X-Y plane



X-Z plane



Y-Z plane

