

Antenna Gain test report

FCC ID: 2AUYFRMX5000

Equipment: Mobile Phone

Brand Name: realme

Model Name: RMX5000

Manufacturer: Realme Chongqing Mobile Telecommunications Corp., Ltd.

No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

Issue Date: July 8, 2022

Test engineer: Jiapeng Ding

Antenna Gain and Antenna Type specification:

Antenna Gain (dBi)		Ant 10	Antenna Type
2.4G WiFi	2400~2483.5MHz	0	IFA(Inverted F Antenna)
5G Wifi	5150~5250 MHz	2.11	IFA(Inverted F Antenna)
	5250~5350 MHz	1.77	IFA(Inverted F Antenna)
	5470~5725 MHz	2.44	IFA(Inverted F Antenna)
	5725~5850 MHz	1.34	IFA(Inverted F Antenna)
BT	2400~2483.5MHz	0	IFA(Inverted F Antenna)

Note:

- 1.) Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.
- 2.) According to Test standard: IEEE Std 149-2021, we measured antenna gain.

List of Test and Measurement Instruments

Test Equipment

Equipment	Manufacturer	Model No.	Test Software	Calibration Date	Due Date
AMS-8923	ETS-Lingen	SN1702	Dynacomm, GTS MaxSign	2024.06.29	2025.06.28
Network Analyzer E5071C	Kesight	MY4690575	N/A	2024.01.08	2025.01.07

I. Measurement Setup:

A. Reflection Coefficient Measurement:

Instrument: Network Analyzer (Kesight E5071C).

Setup:

- 1. Calibrate the Network Analyzer by one port calibration using Kesight 85093C Electronic calibration module .
- 2. Connect the antenna under test to the Network Analyzer.
- 3. Measure the S11(reflection coefficient),Return Loss....

B. Pattern Measurement:

- 1. A Fully Anechoic Chamber is used to simulate free-space conditions.
- 2. A Fully Anechoic Chamber is a shielded room lined with RF/microwave absorber on all walls, ceiling, and floor.
- 3. RF/microwave absorber reduces reflections from the inner walls of the shield. Absorber performance depends on the depth and design of the absorber and the angle of incidence of the field.
- 4. Normal incidence is best, shallower angles are worse.

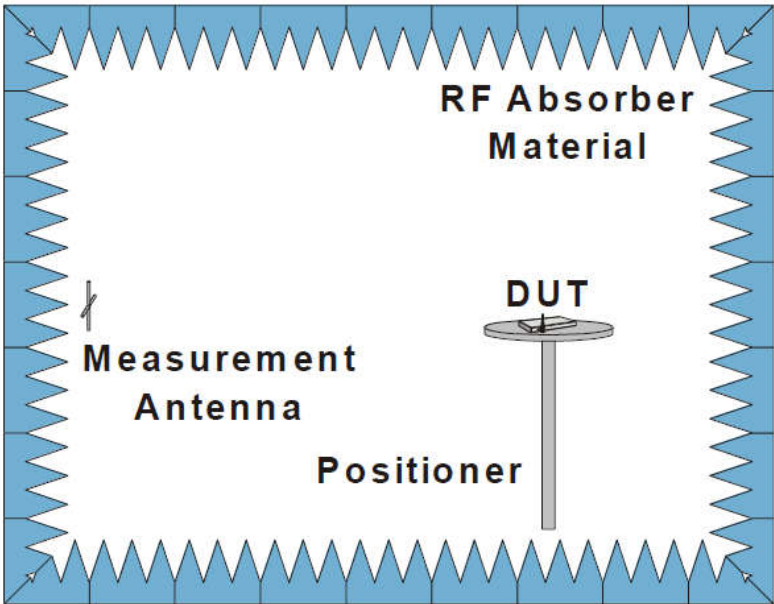
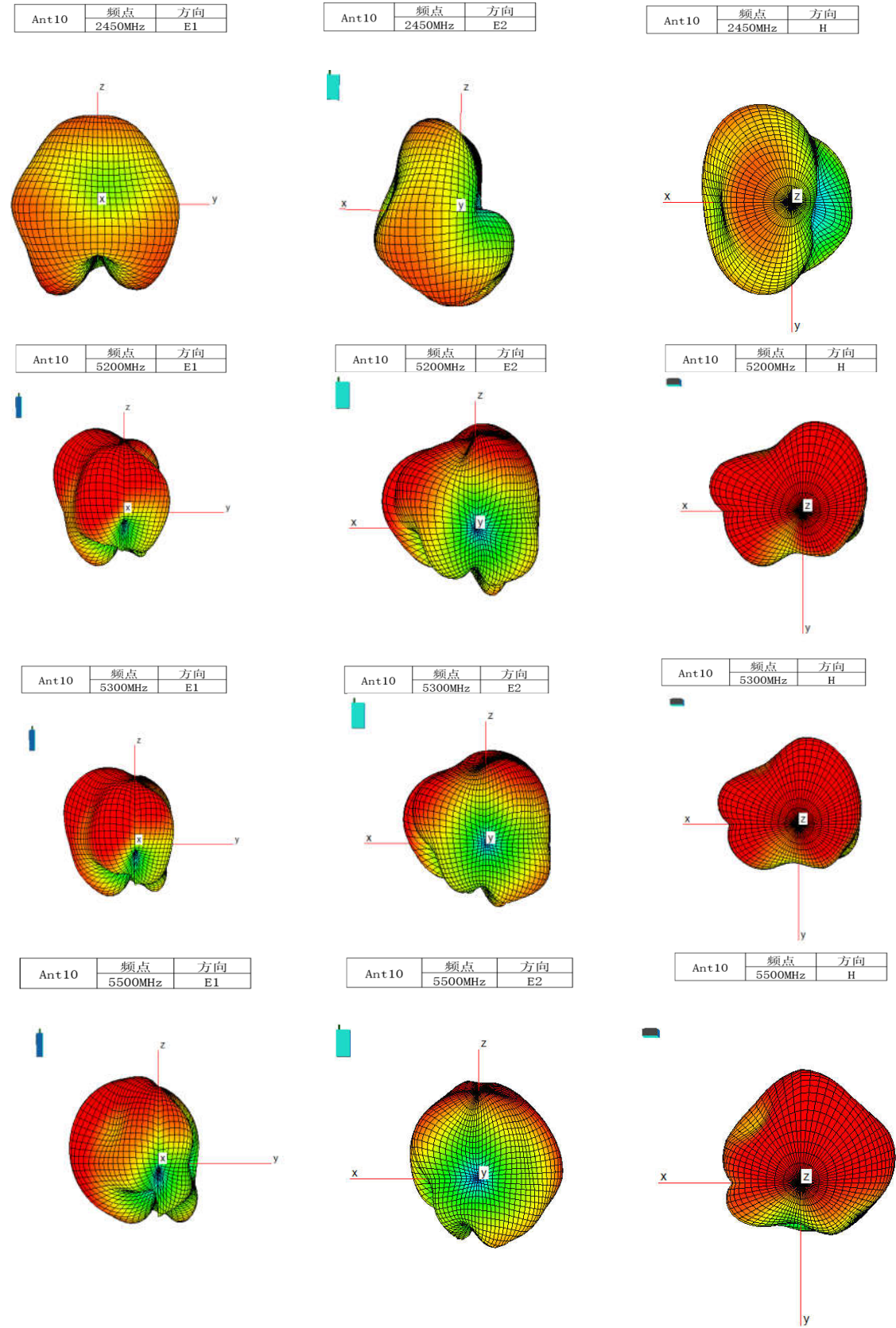
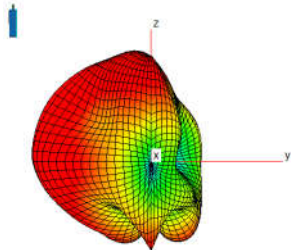


Fig. 4. The fully anechoic chamber

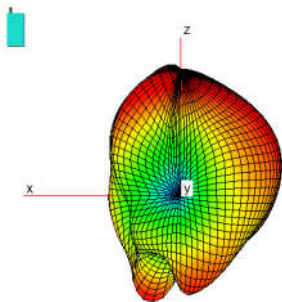
BT&WIFI 2D or 3D pattern



Ant10	频点	方向
	5780MHz	E1



Ant10	频点	方向
	5780MHz	E2



Ant10	频点	方向
	5780MHz	H

