

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.

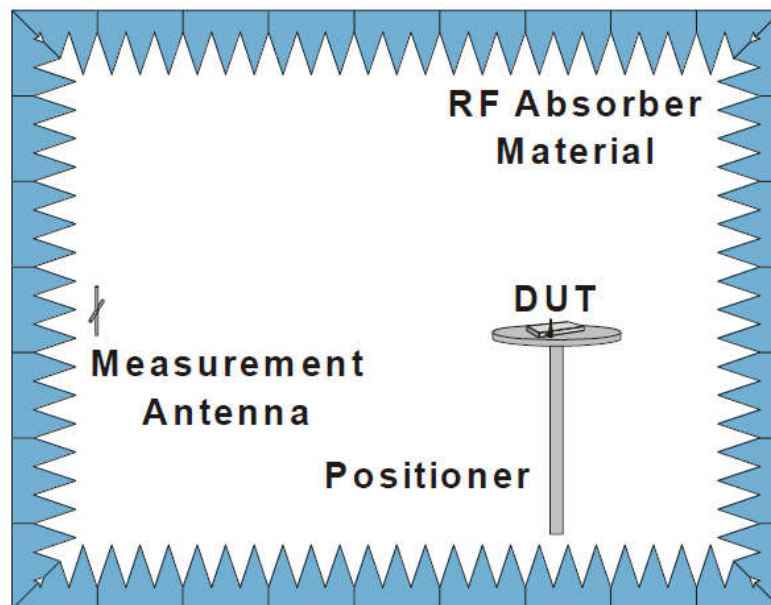
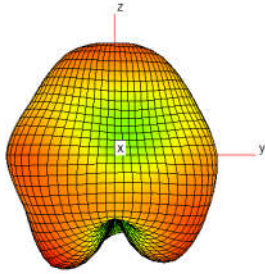


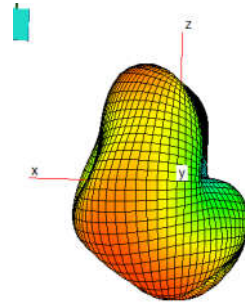
Fig. 4. The fully anechoic chamber

BT&WIFI 2D or 3D pattern

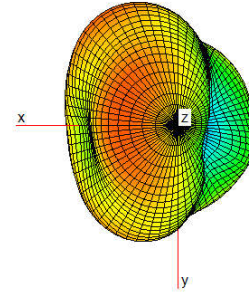
Ant10	频点	方向
	2450MHz	E1



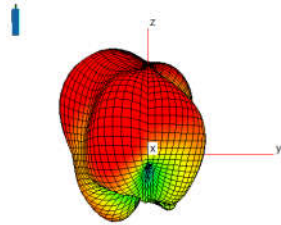
Ant10	频点	方向
	2450MHz	E2



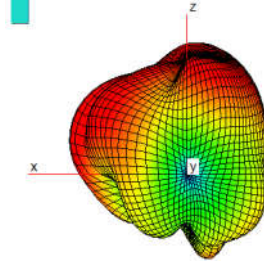
Ant10	频点	方向
	2450MHz	H



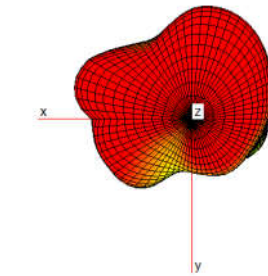
Ant10	频点	方向
	5200MHz	E1



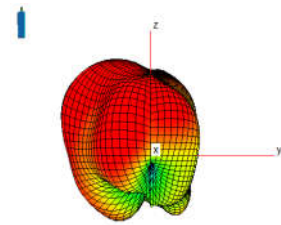
Ant10	频点	方向
	5200MHz	E2



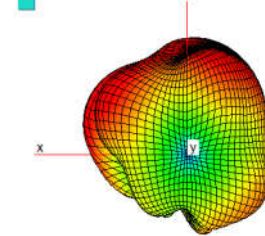
Ant10	频点	方向
	5200MHz	H



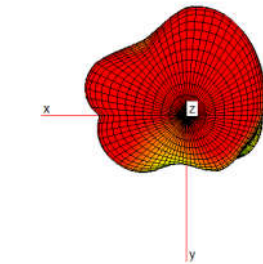
Ant10	频点	方向
	5300MHz	E1



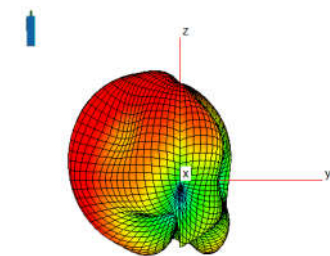
Ant10	频点	方向
	5300MHz	E2



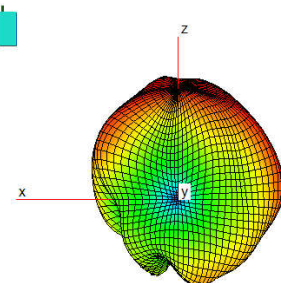
Ant10	频点	方向
	5300MHz	H



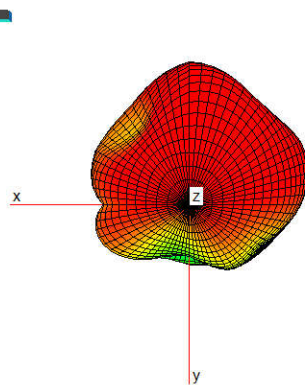
Ant10	频点	方向
	5500MHz	E1



Ant10	频点	方向
	5500MHz	E2



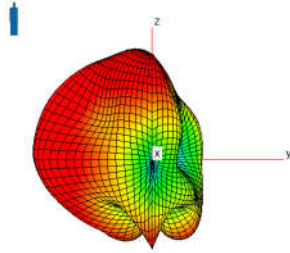
Ant10	频点	方向
	5500MHz	H



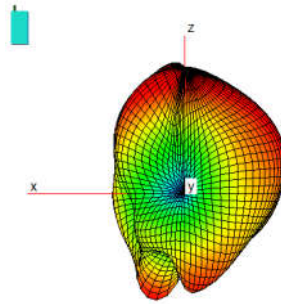
Test Report

Report No.: OP20240723

Ant10	频点	方向
	5780MHz	E1



Ant10	频点	方向
	5780MHz	E2



Ant10	频点	方向
	5780MHz	H

