

Antenna Gain test report

FCC ID: 2AUYFRMX3867

Equipment: Mobile Phone

Brand Name: realme

Model Name: RMX3867

Manufacturer: Realme Chongqing Mobile

Telecommunications Corp., Ltd.

No.178 Yulong Avenue, Yufengshan, Yubei District,

Chongqing, China

Issue Date: December 26, 2023

Project Engineer: pengtao Nan Date:2023/12/26

Checked by: yunpan Wei Date:2023/12/26

Approved by:wei Li Date:2023/12/26

Antenna Gain and Antenna Type specification:

Antenna Gain (dBi)		Ant 7	Ant 8	Antenna Type	厂家	型号
2.4G WiFi	2400~2483.5 MHz	-1.2	-3.87	IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739
5G Wifi	5150~5250 MHz	0.97	-0.33	IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739
	5250~5350 MHz	1.61	0.91	IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739
	5470~5725 MHz	0.49	2.15	IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739
	5725~5850 MHz	-0.4	1.65	IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739
BT	2400~2483.5 MHz	-1.2		IFA(Inverted F Antenna)	Huizhou Speed Wireless technology Co.,Ltd.	M739

Table1 Antenna Gain and Antenna Type specification

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.

Accoring to Test standard: IEEE Std 149-2021, we measure antenna gain .

List of Test and Measurement Instruments**TEST EQUIPMENT**

NO.	Equipment	Manufacturer	Model No.	Last Calibration Date	Period
1	RayZone 2800	GTS	CT1012116 0B5066	Jun.30, 2023	1 Year
2	Network Analyzer E5071C	Kesight	MY4673659 8	Jun.30, 2023	1 Year

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:

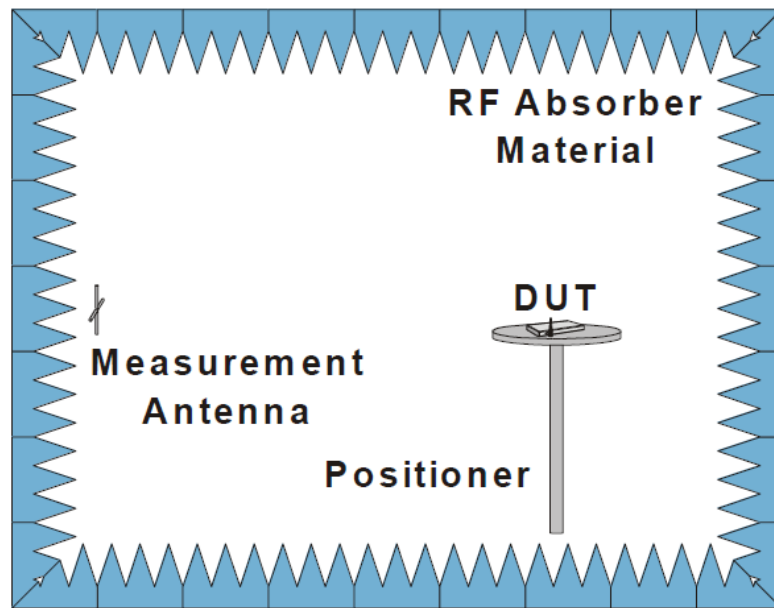
A Fully Anechoic Chamber is used to simulate free-space conditions.

A Fully Anechoic Chamber is a shielded room lined with RF/microwave absorber on all walls, ceiling, and floor.

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.

Normal incidence is best, shallower angles are worse.



The fully anechoic chamber