Antenna Reports

Company: Realme

Model name: RMX3997

Issue date: 2023/12/15

Documented by:_____Yandi_____

Antenna Summary Table

Check items	Information
Provided by lab	RayZone2800 (GTS)
Manufacturer/ Brand name	Realme
Product Model Name	RMX3997
Antenna Model name	M718
List of calibrated test equipment	GTS2800 with calibrated date: 2023/10/18
Antenna detail info.	Show WLAN/BT/ IFA type antenna.
Antenna gain test data	Included antenna frequency, gain pattern
Antenna Manufaturer Address	Building H, No. 55, Shengchuang Road, Yushan Town, Kunshan City, Jiangsu Province Building 8, 1st-3rd Floor, Tongfu Village Industrial Zone, Xinshi Community, Dalang Street, Longhua District, Shenzhen City, Guangdong Province

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

Antenna Test data:

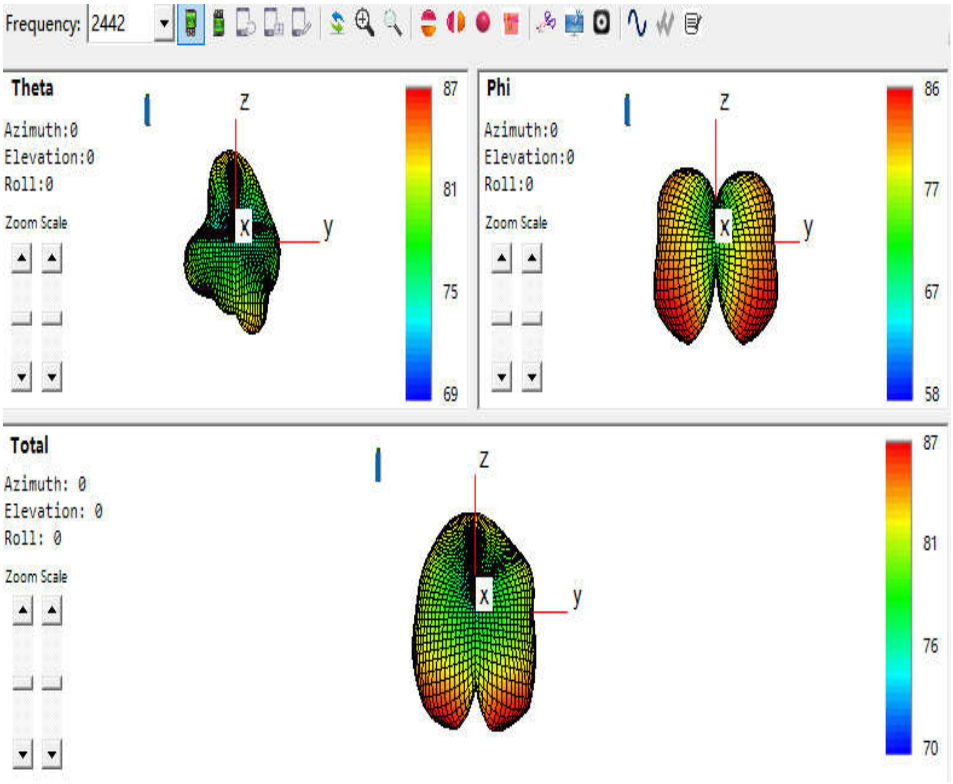
Antenna model name: M718

Antenna type: IFA

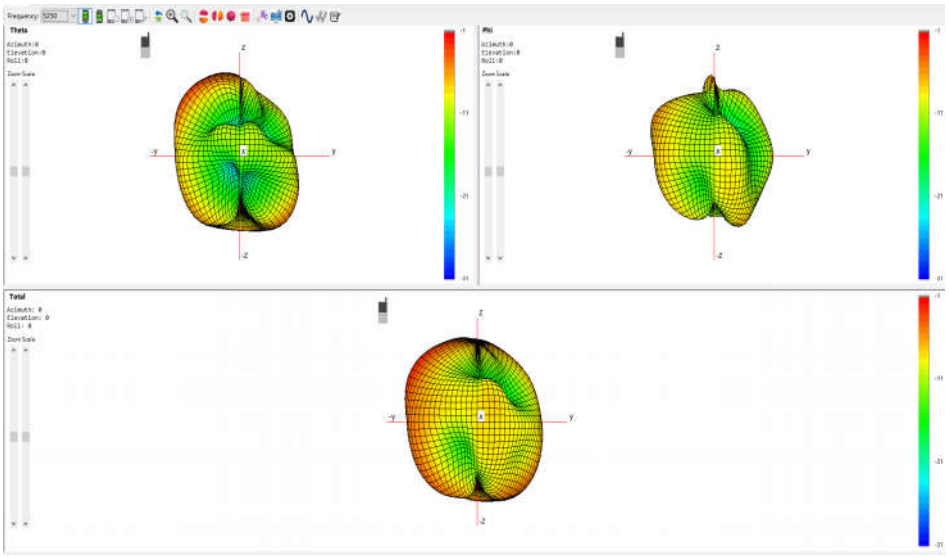
Antenna Gain and Antenna Type specification:

Antenna Gain (dBi)		Ant 8	Antenna Type
2.4G WiFi	2400~2483.5MHz	-0.3	IFA(Inverted F Antenna)
5G Wifi	5150~5250 MHz	-1.56	IFA(Inverted F Antenna)
	5250~5350 MHz	-1.56	IFA(Inverted F Antenna)
	5470~5725 MHz	-0.1	IFA(Inverted F Antenna)
	5725~5850 MHz	0.5	IFA(Inverted F Antenna)
BT	2400~2483.5MHz	-0.3	IFA(Inverted F Antenna)
NFC	13.56MHz	/	LOOP Antenna

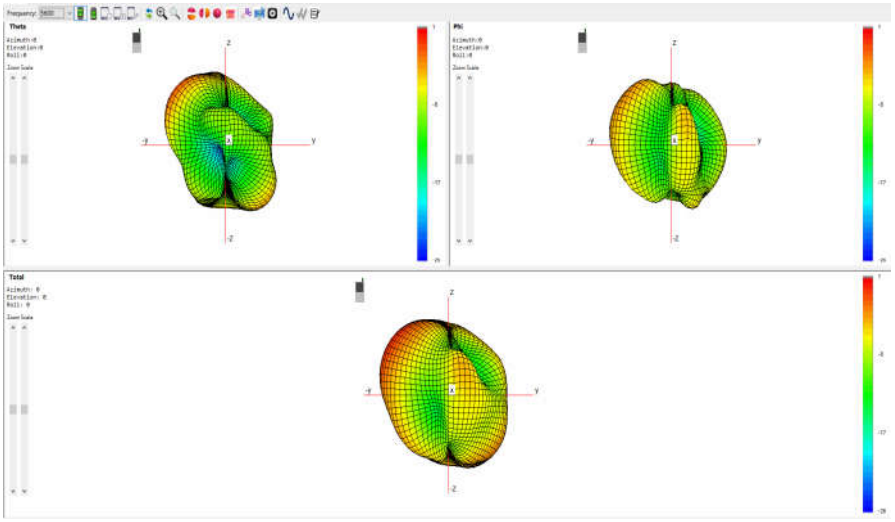
WIFI 2.4G (2442MHz)



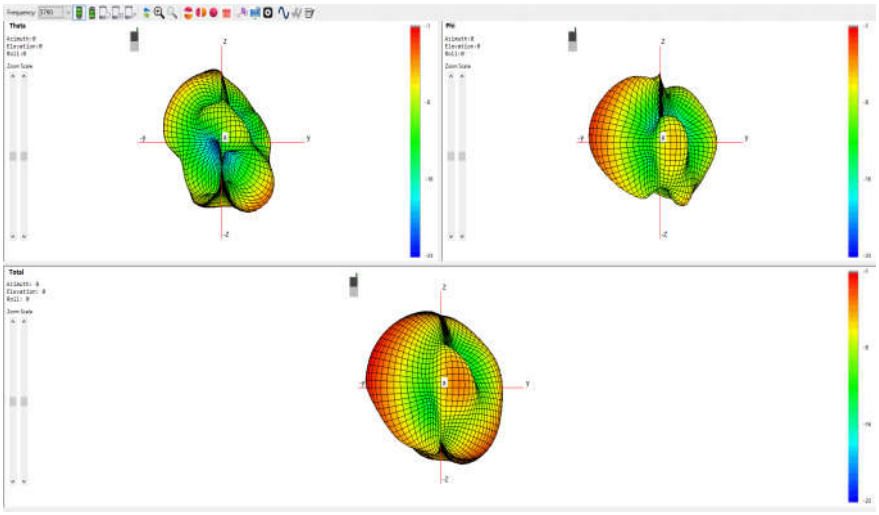
WIFI 5G B1/2 (5150~5350)



WIFI 5G B3 (5470~5725)



WIFI 5G B4 (5725~5850)



Tset equipment software **GTS MaxSign-Libra**

Documented by:Yandi

List of Test and Measurement Instruments

NO.	Equipment	Manufacturer	Model No.
1	RayZone2800	GTS	CT10121160B5066
2	Network Analyzer E5071C	Kesight	MY46736598

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**.**

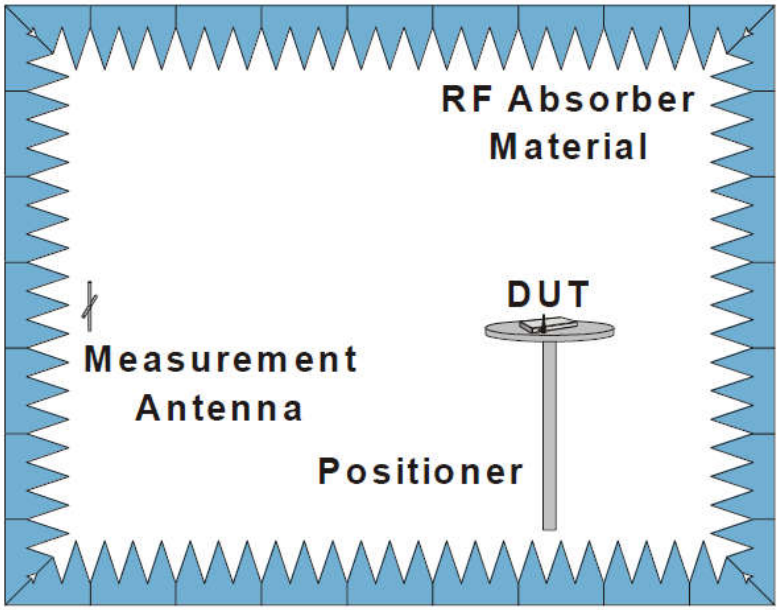


Fig. 4. The fully anechoic chamber