

# Antenna Test Report

**Test Standard:** GB/T9401-2008;ANSI/IEEE 149-1979

**Manufacturer:** Dongguan Qianhe Electronic Technology Co., Ltd.

**Product Name:** MINI EMMA NEO

**Model:** SA299C

**Report No.:** SSP24102808A

**Tested Date:** 2024-10-25

**Issued Date:** 2024-10-28

**Tested By:** William Liu (Engineer)

**Approved By:** Lahm Peng (Manager)

**Prepared By:**

*William Liu*  
*Lahm Peng*

Shenzhen ZRLK Testing Technology Co.,Ltd.

1F, No.35 Building,Changxing Technology Industrial Park,Yutang Street,

Guangming New District,Shenzhen City, Guangdong Province, China

Tel:+86-755-33019599 Fax.:+86-755-33019599 Website:www.zrlklab.com

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen ZRLK Testing Technology Co.,Ltd.

# 1. General Information

## 1.1 Product Information

Manufacturer	
Manufacturer:	Dongguan Qianhe Electronic Technology Co., Ltd.
Address of Manufacturer:	Building 3, No. 3, Chang'an Fengsheng Road, Chang'an Town, Dongguan, Guangdong, China

General Description of Antenna	
Product Name:	MINI EMMA NEO
Model No.:	SA299C
Frequency Range:	2400-2500MHz
Type of Antenna:	Chip Antenna
Antenna Gain:	-8.39dBi (Max.)
Impedance:	50 ohm

Antenna View



## 1.2 Test Methodology

All measurements contained in this report were conducted with standards IEEE 149-1979 for IEEE Standard Test Procedures for Antennas.

## 1.3 Test Facilities

Testing Lab: ShenzhenZRLK Testing Technology Co., Ltd.
All measurement facilities used to collect the measurement data are located at 1F, No. 35 Building, Changxing Technology Industrial Park, Yutang Street, Guangming New District, Shenzhen City, Guangdong Province, China

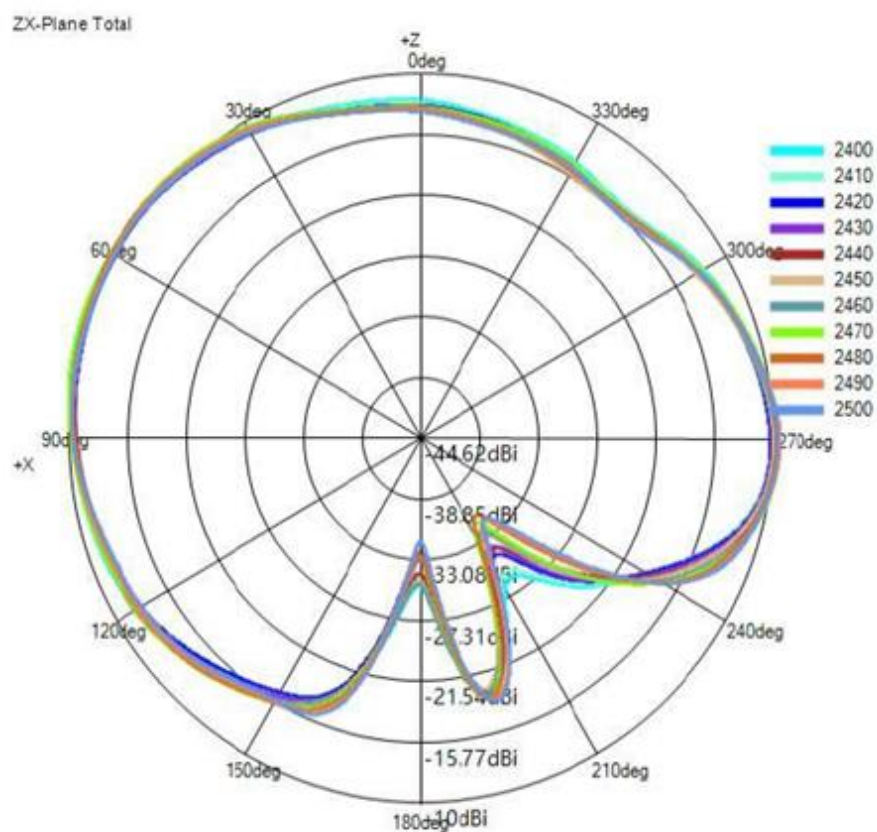
## 2. OTA Test

### 2.1 Gain

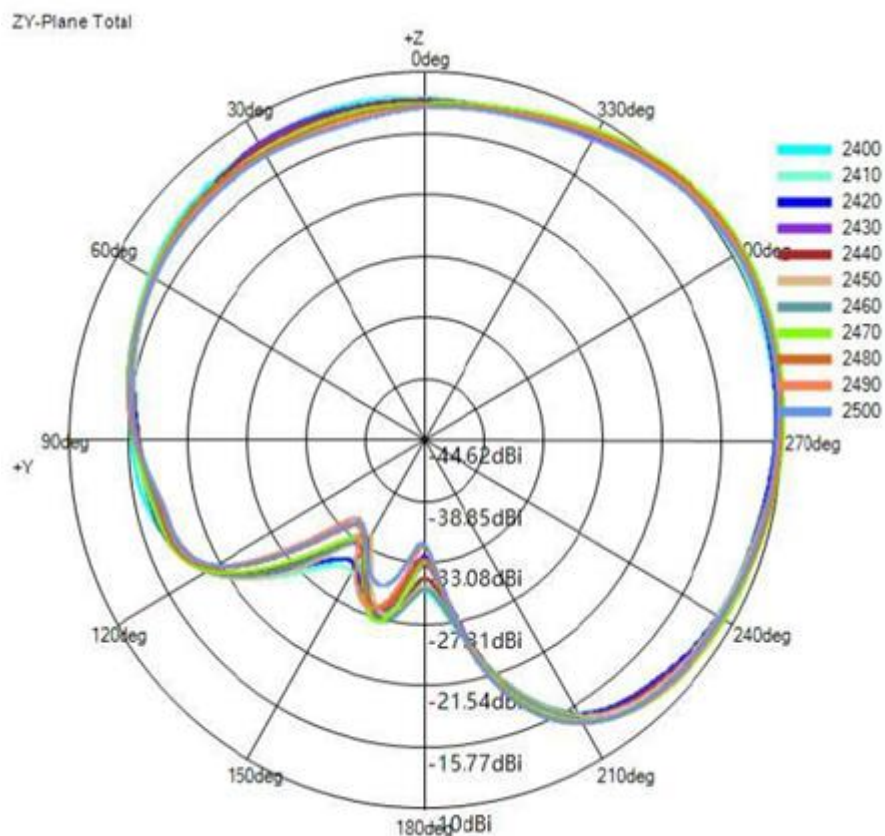
Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain/dBi	-8.95	-9.22	-9.09	-8.85	-8.67	-8.65	-8.50	-8.39	-8.48	-8.43	-8.59
Efficiency/%	5.94	5.76	5.70	5.84	5.92	5.89	6.21	6.43	6.12	6.00	5.88

### 2.2 Radiation Pattern View

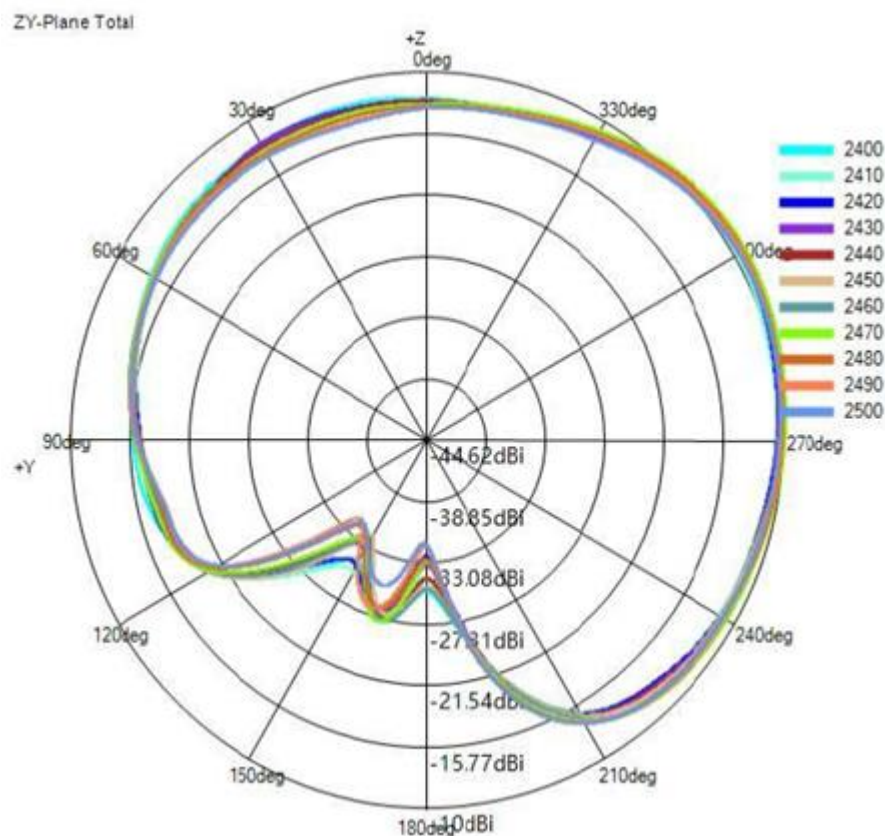
(1) X-Z Plane(unit:dBi):



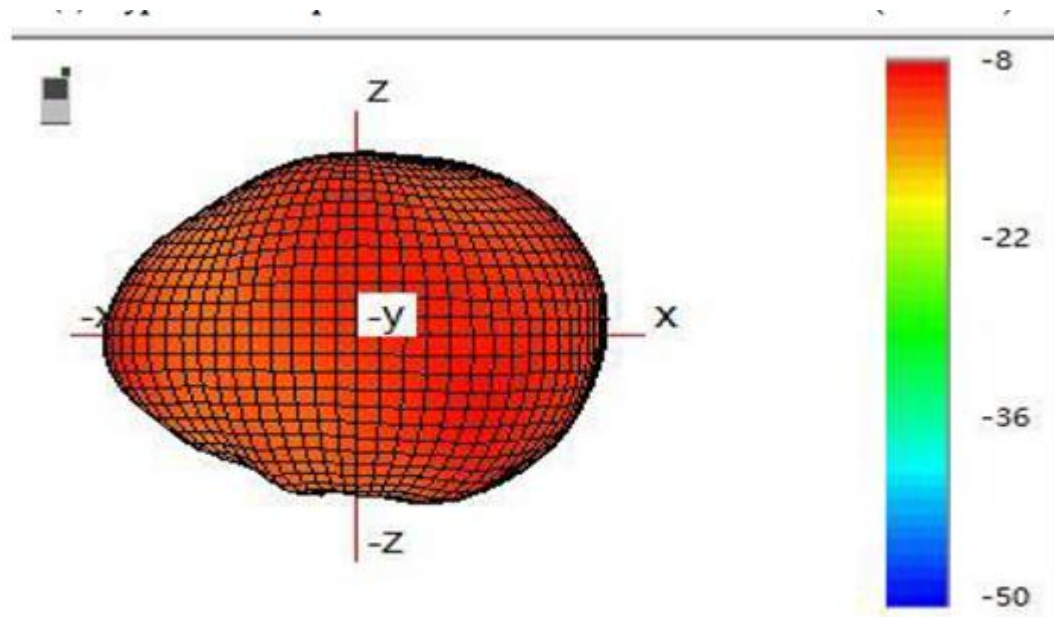
(2) Y-Z Plane(unit:dBi):



(3)X-Y Plane(unit:dBi):



(4) Typical Free Space 3D Radiation Pattern at 2.47GHz(unit:dBi):



**End**