

# **Antenna**

## **Performance**

Chip Ceramic Bluetooth Antenna

Model No. :MGMA3216H2450-A02

Test Application Vendor

Shenzhen MJ Microelectronics Technology Co.

Shenzhen Baoan District Guanlan Town Golf Avenue Yuxing Road

## 1. Technical Description

Note: Provided by the applicant.

### 1.1 Applicant Information

Company: Shenzhen Meijie Microelectronics Technology Co.

Address: Yuxing Road, Golf Avenue, Guanlan Town, Bao'an District, Shenzhen, China.

Contact: Liao Cailiang

Tel: 13480808433

Fax:

E-mail:

### 1.2 Description of tested antenna

Model Name: MGMA3216H2450-A02

## 2 Photographs of the measured object

Please refer to Annex B.

### 2.1 Sample identification

No.	Note
AUT02	MGMA3216H2450-A02

### 3. Test structures

#### 3.1 Reference Document

Main reference document for testing:

No.	Identity	Document Title
1	IEEE149-1979	IEEE Standard Test Procedures for Antennas

Other Test Reference Documents:

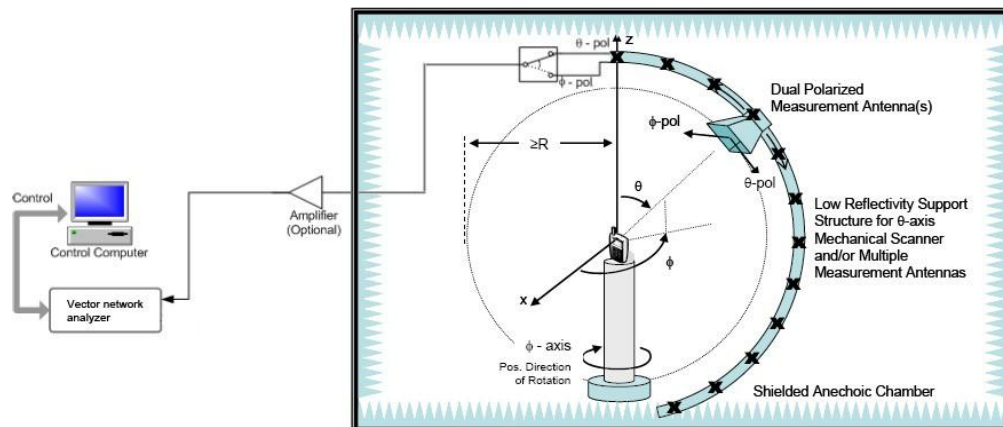
No.	Identity	Document Title
2	ETSI EN 50383	Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz – 40 GHz).

#### 3.2 Test Conditions

Test environment conditions:

- 1) Temp: 20° C
- 2) Moisture: 60%

Test system connection:



### 3.3 List of test results

#### 3.3.1 Antenna Gain (dBi)

AUT02 antennae

2402MHZ	2441MHZ	2480MHZ
-0.081	-0.351	-0.507

#### 3.3.2 Antenna efficiency(%)

AUT02 antennae

2402MHZ	2441MHZ	2480MHZ
39.6	37.4	36.6

## Annex A Pictures

### 1. Sample



## Annex B Raw Data and Graphs

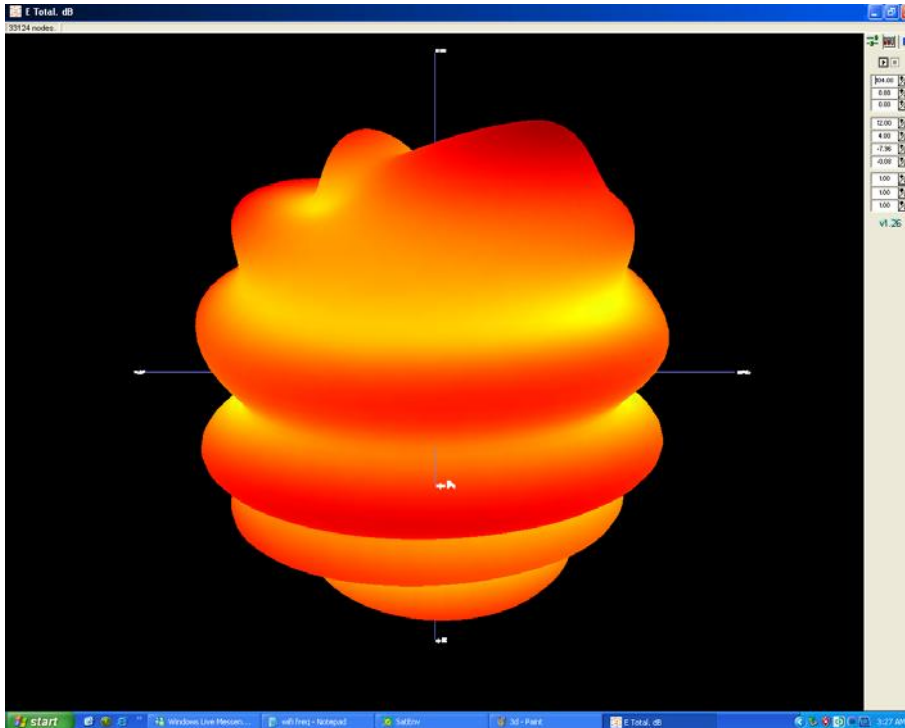
### 1. Raw data

Please see Annex D for a separate raw data file DATA.xls.

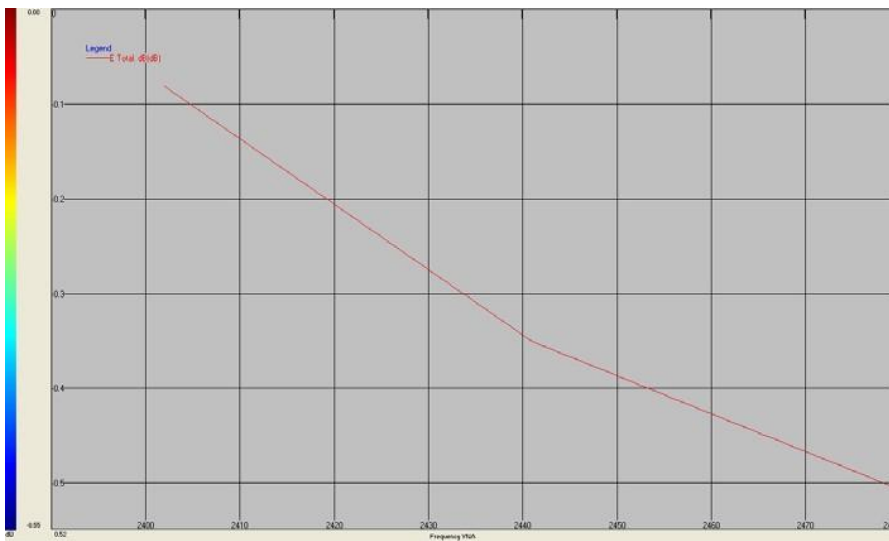
### 2. Radiation map of the measured object

#### a) AUT02

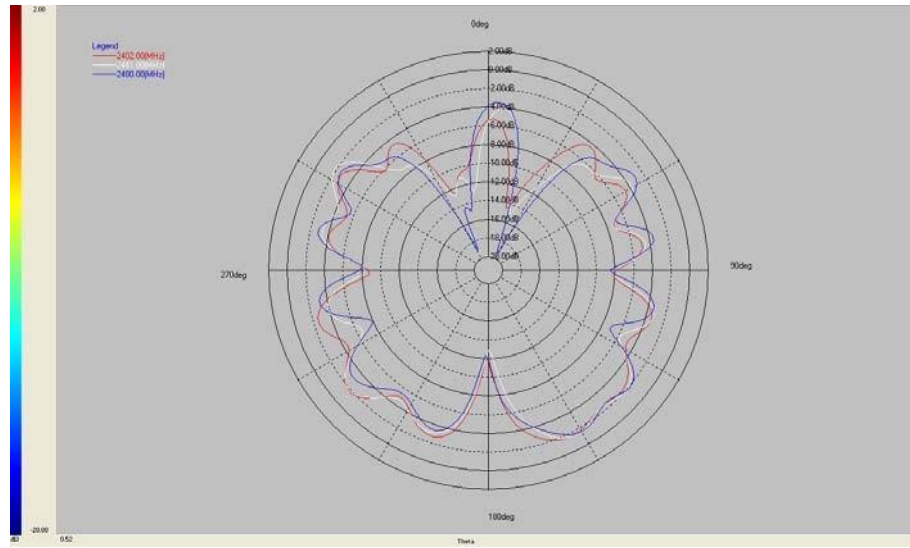
##### 1) 3D (2402MHz)



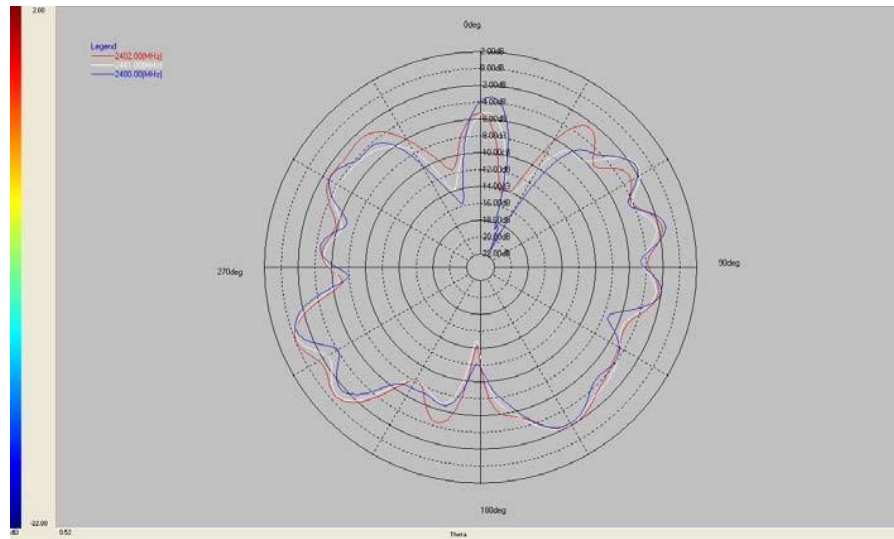
##### 2) Etotal



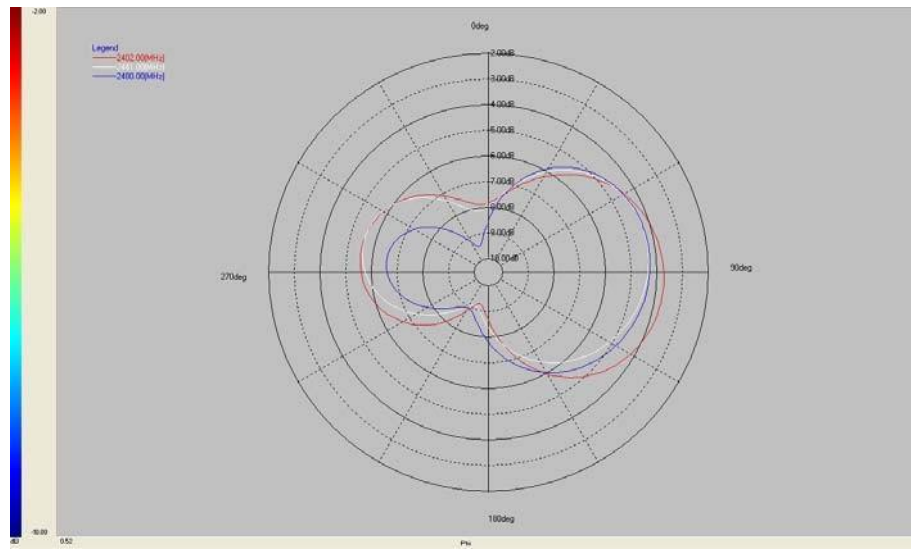
### 3) $\Phi=0$



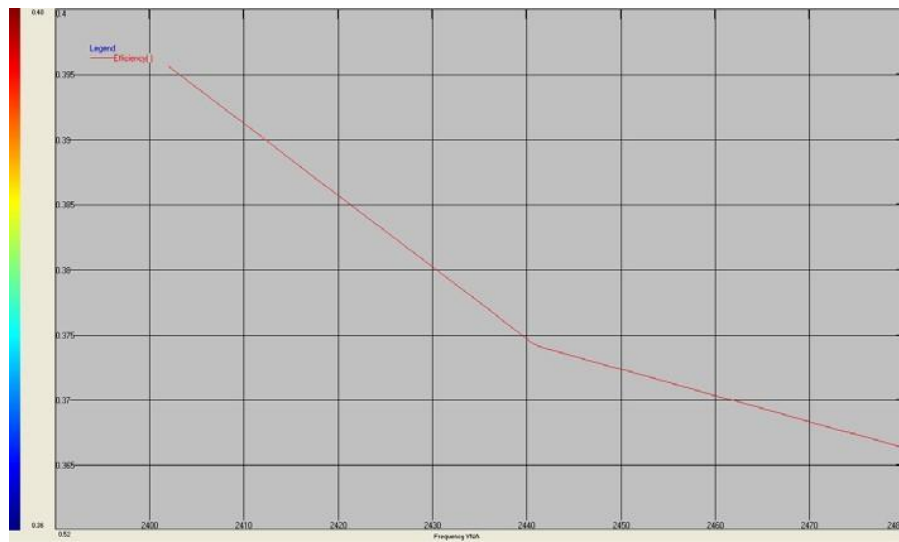
### 4) $\Phi=90$



### 5) Theta=90



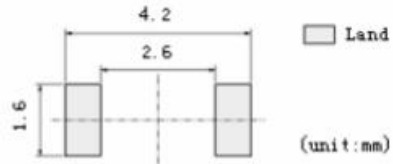
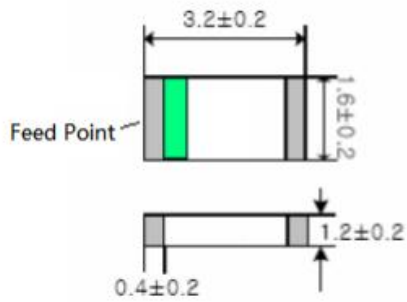
### 6) Efficiency





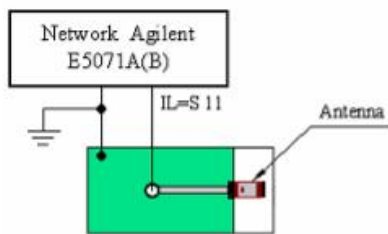
### 3 Appearance and Dimensions

Unit: mm

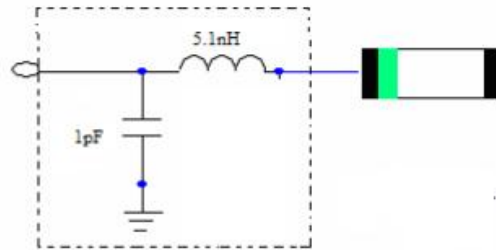


All the technical data and information specified herein are subject to variation without prior notice

### 4 Test Circuit and Testing Conditions



No Matching Circuit Testing



LC Matching Circuit Testing