Antenna

Performance

Test Report

Chip Ceramic Bluetooth Antenna

Model No.:MGMA3216H2450-A02

Report No.:SZ08010022W01

Test Application Vendor
Shenzhen MJ Microelectronics Technology Co.
Shenzhen Baoan District Guanlan Town Golf Avenue Yuxing Road

Laboratory
Shenzhen Moore Ring Communications Technology Co., Ltd.
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1. Summary

1.1 Declaration

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（3）This report cannot be made public and/or promoted for publicity purposes in part or in whole without Morlab's written permission.
（4）This report is not valid if the signatures of the Project Manager, Tester, and Laboratory Supervisor are incomplete.
（5）Any significance must be submitted to Morlab within 30 working days of receipt of the report.

1.2 Test Information

Report No.:	SZ08010022W01
Application Date:	2008-1-10
Test Date:	2008-1-10
Laboratory Supervisor:	Shu Ruan
Manager:	DengJiankun
Test Engineer:	Huangpu Long

1.3 Conclusion

During the test, the DUT worked normally and the test was passed.

2. General Description

2.1 Test laboratory information

Company:Shenzhen Electronic Product Quality Testing Centre
Quality Testing Centre Department:Moore Laboratory
Address:3/F, Electronic Testing Building, Shahe Road, Xili, Shenzhen, China
Lab Supervisor:Shu Ruan
Tel:+86 755 86130268
Fax:+86 755 86130218

2.2 Test locations

Name: Moore Laboratory, Shenzhen Electronic Product Quality Testing Centre
Address: 3/F, Electronic Testing Building, Shahe Road, Xili, Shenzhen, China

2.3 Recognition of certificates

Accredited Laboratory: CNAL No. L1659 (Shenzhen Electronic Product Quality Testing Centre)

2.4 List of test equipment

No.	Type	Description
1	8960-5515C System Simulator	Manufacturer: Agilent
2	CMU 200 System Simulator	Manufacturer: R&S
3	E5071B Vector Network Analyzer	Manufacturer: Agilent
4	4*4*4 Full Anechoic Chamber	Manufacturer: Satimo
5	SG24 Multi-probe Antenna Measurement System	Manufacturer: Satimo Applied Standard(s): Over the air performance test plan v2.2

3. Technical Description

Note: Provided by the applicant.

3.1 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:

3.2 Description of tested antenna

Model Name: MGMA3216H2450-A02

3.2.1 Photographs of the measured object

Please refer to Annex B.

3.2.2 Sample identification

No.	Note
AUT02	MGMA3216H2450-A02

4. Test structures

4.1 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).

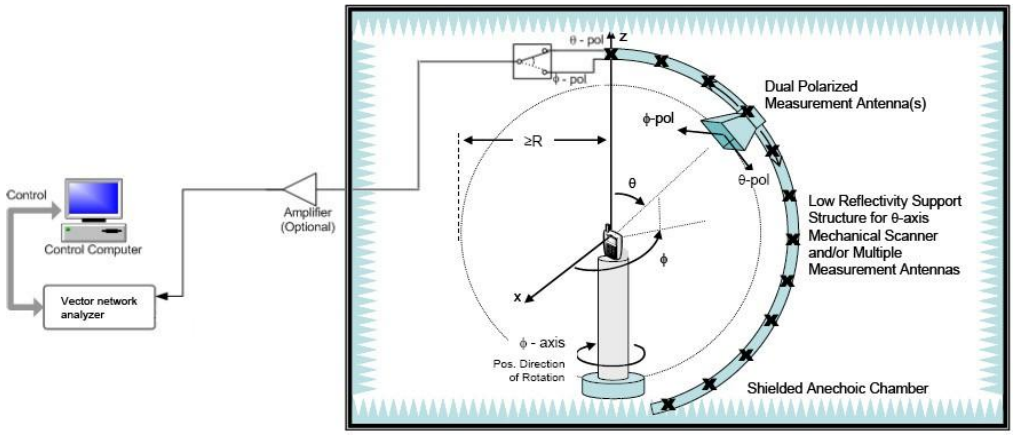
4.2 Test Conditions

Test environment conditions:

1） Temp：20° C

2） Moisture：60%

Test system connection:



4.3 List of test results

4.3.1 Antenna Gain (dBi)

AUT02 antennae

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

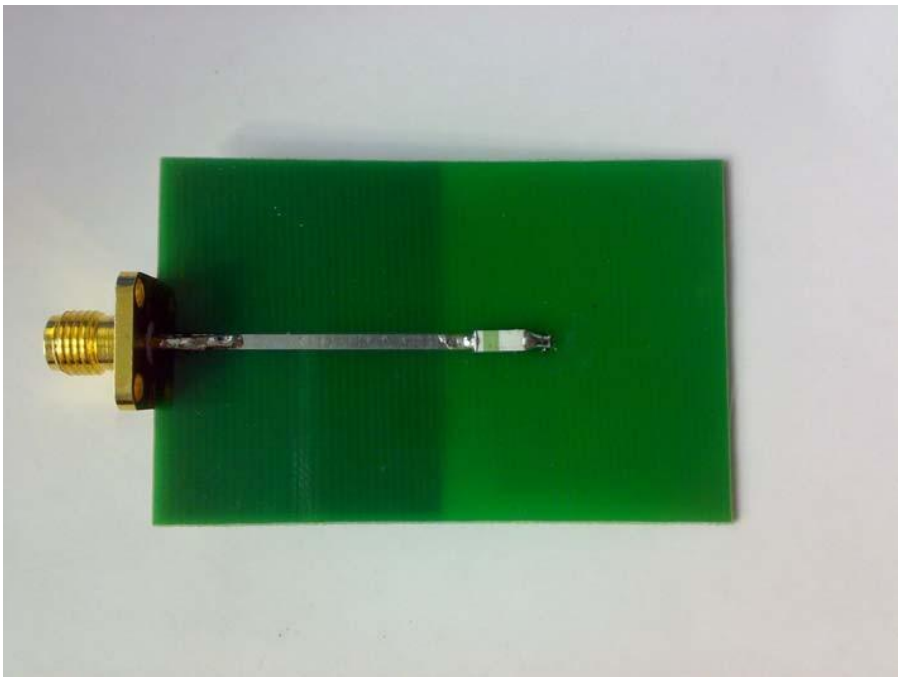
4.3.2 Antenna efficiency(%)

AUT02 antennae

2402MHZ	2441MHZ	2480MHZ
39.6	37.4	36.6

Annex A Pictures

1. Sample



Annex B Raw Data and Graphs

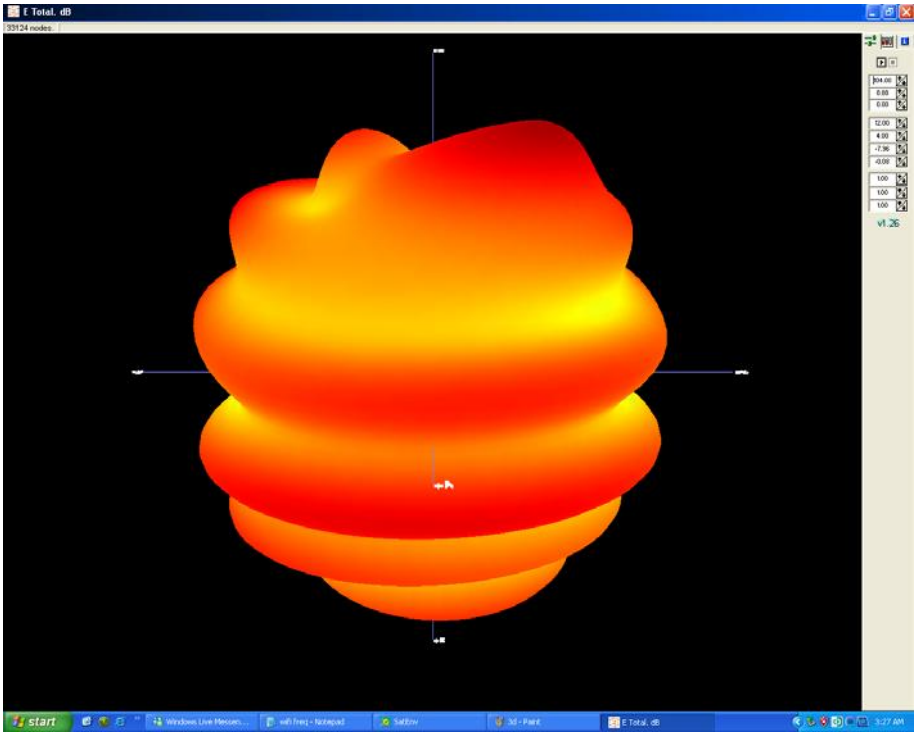
1. Raw data

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

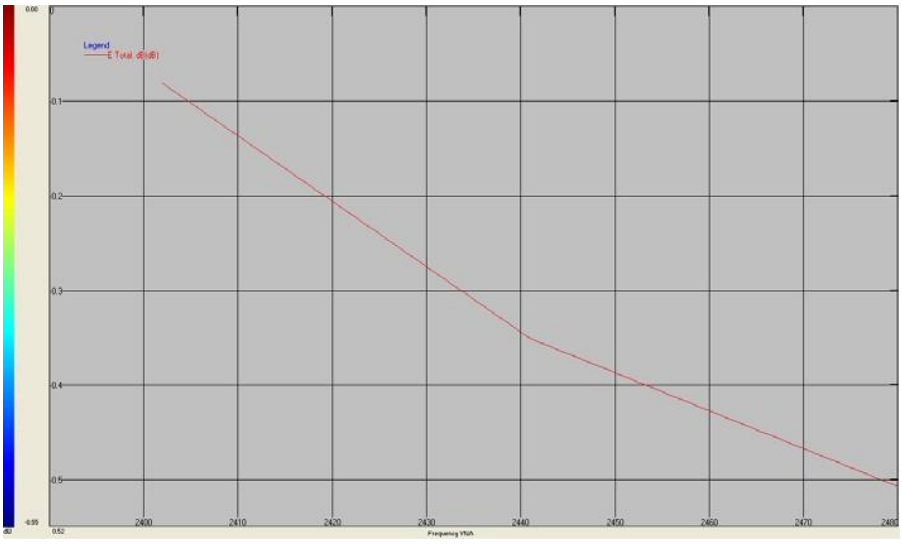
2. Radiation map of the measured object

a) AUT02

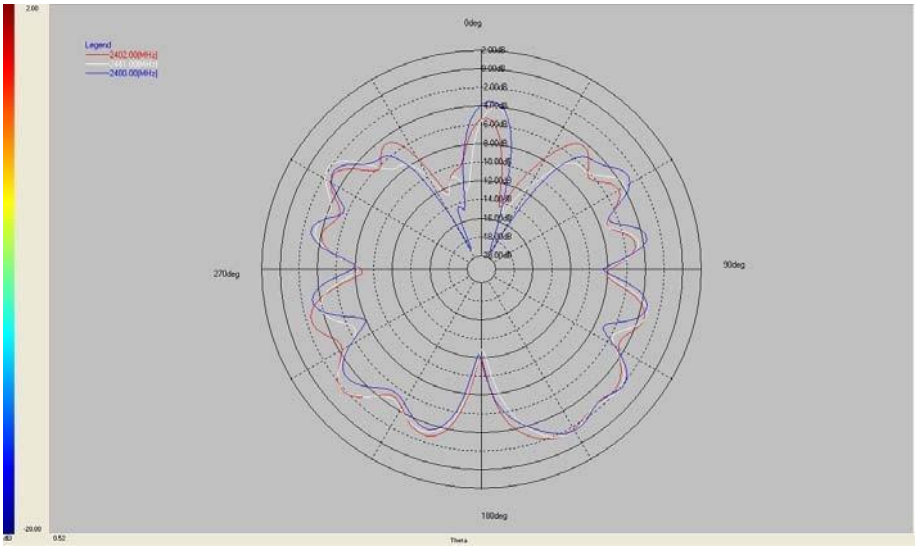
1) 3D (2402MHz)



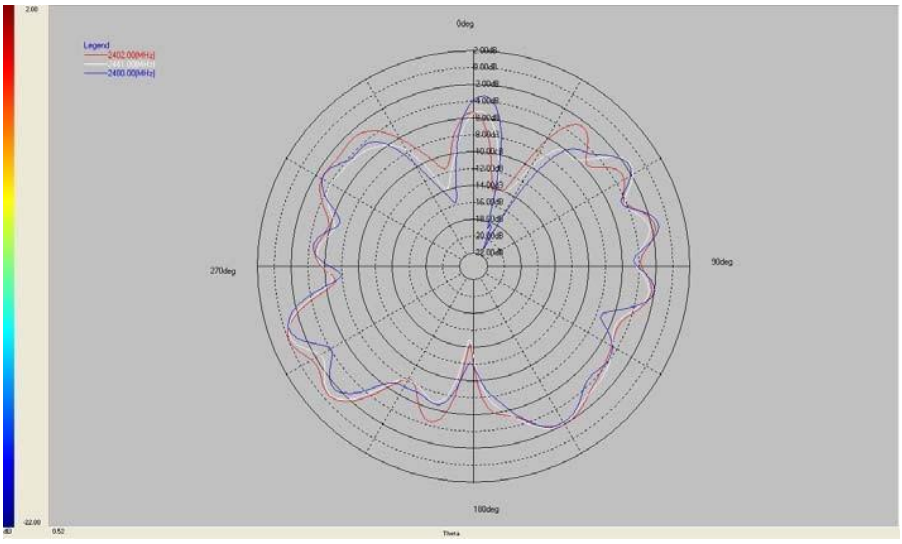
2) Etotal



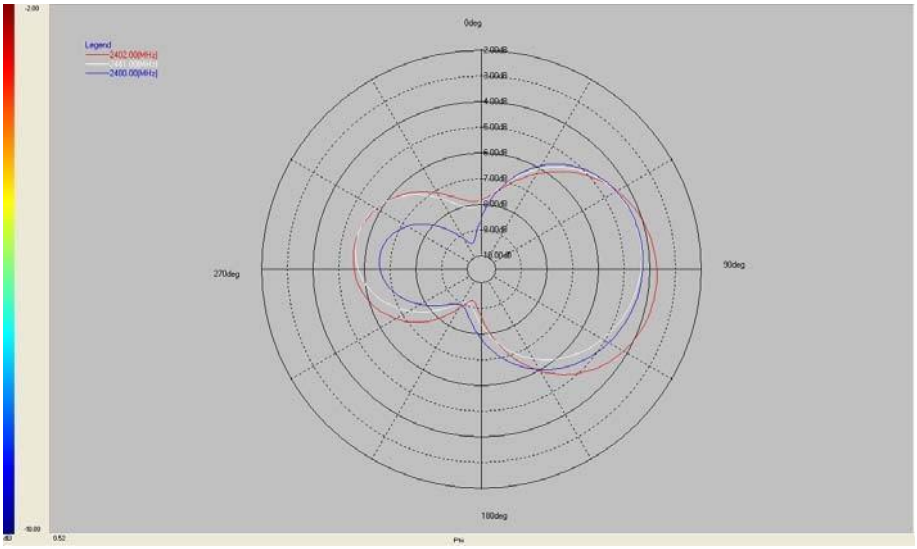
3) Phi=0



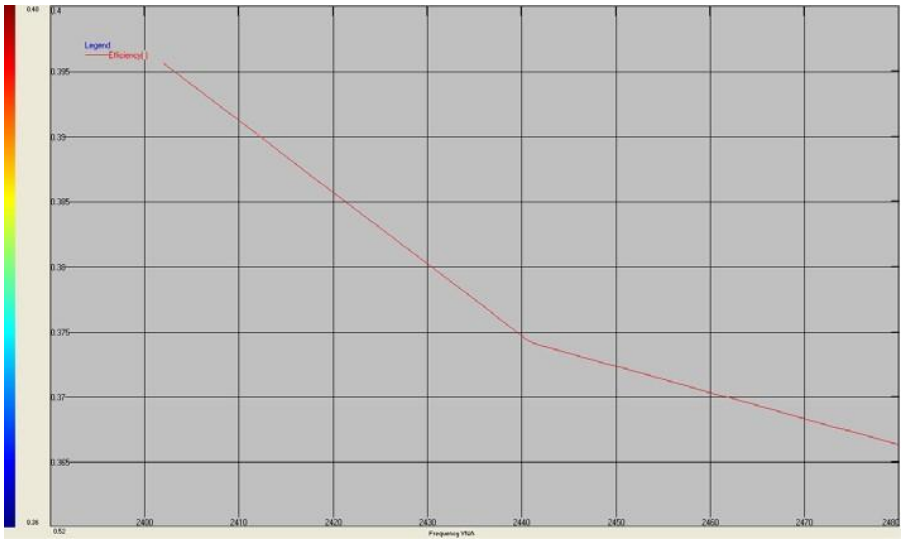
4) Phi=90



5) Theta=90

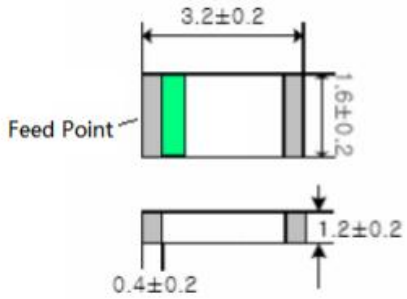


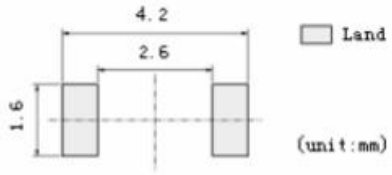
6) Efficiency



3 Appearance and Dimensions

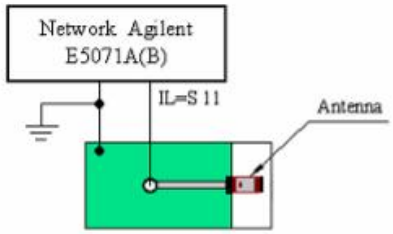
Unit：mm



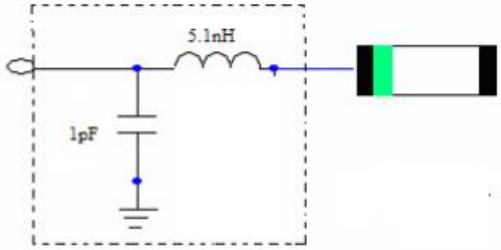


All the technical data and information specified herein are subject to variation without prior notice

4 Test Circuit and Testing Conditions



No Matching Circuit Testing



LC Matching Circuit Testing