

EDMI (Shenzhen) Co., Ltd

RF Module

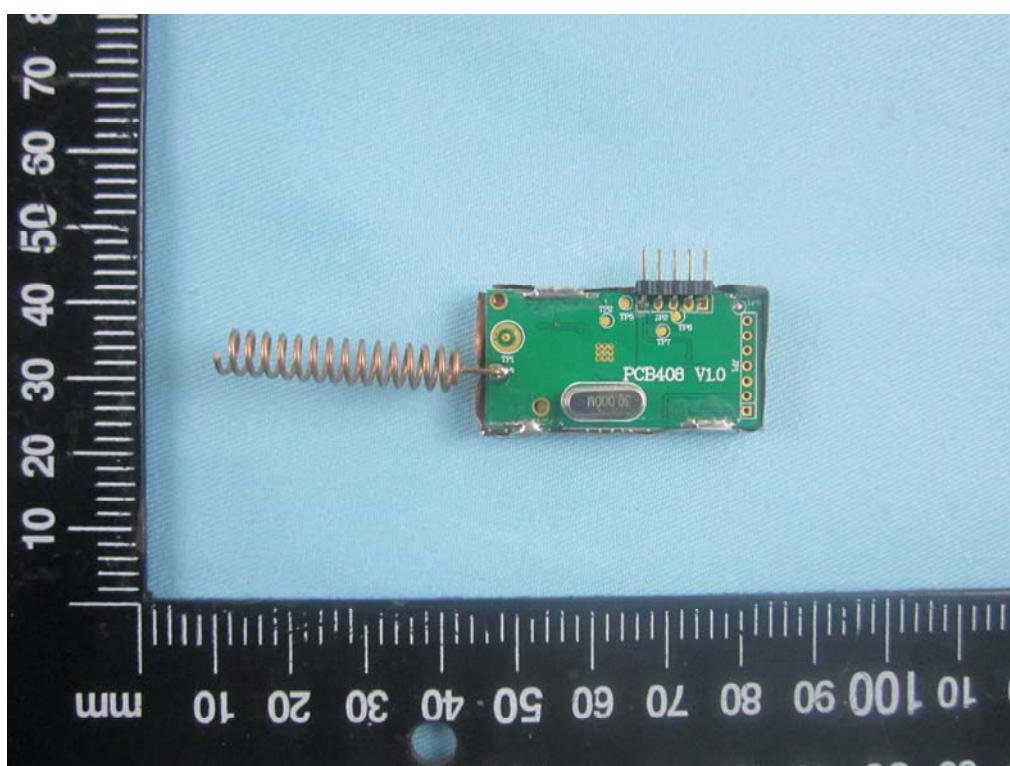
Main Model: MSi4432

Serial Model: N/A

October 14, 2014

Report No.: 14070483-FCC-R1

(This report supersedes NONE)



Modifications made to the product : None

This Test Report is Issued Under the Authority of:

Herith Shi	Alex Liu	
Herith Shi Compliance Engineer	Alex Liu Technical Manager	

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Test result presented in this test report is applicable to the representative sample only.

RF Test Report
To: FCC 15.249:2013

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Main Model: MSi4432
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Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 2 of 36
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Laboratory Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management through out a project. Our extensive experience with China, Asia Pacific, North America, European, and international compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

SIEMIC (Shenzhen-China) Laboratories Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC , RF/Wireless , Telecom
Canada	EMC, RF/Wireless , Telecom
Taiwan	EMC, RF, Telecom , Safety
Hong Kong	RF/Wireless ,Telecom
Australia	EMC, RF, Telecom , Safety
Korea	EMI, EMS, RF , Telecom, Safety
Japan	EMI, RF/Wireless, Telecom
Singapore	EMC , RF , Telecom
Europe	EMC, RF, Telecom , Safety



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1

Issue Date: October 14, 2014

Page: 3 of 36

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 4 of 36
www.siemic.com
www.siemic.com.cn

CONTENTS

1	EXECUTIVE SUMMARY & EUT INFORMATION	5
2	TECHNICAL DETAILS	6
3	MODIFICATION	7
4	TEST SUMMARY	8
5	MEASUREMENTS, EXAMINATION AND DERIVED RESULTS	9
ANNEX A.	TEST INSTRUMENT & METHOD	23
ANNEX B.	EUT AND TEST SETUP PHOTOGRAPHS	27
ANNEX C.	TEST SETUP AND SUPPORTING EQUIPMENT	31
ANNEX D.	USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PART LIST	35
ANNEX E.	DECLARATION OF SIMILARITY	36



SIEMIC, INC.

Accessing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 5 of 36
www.siemic.com
www.siemic.com.cn

1 EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the EDMI (Shenzhen) Co., Ltd , RF Module and model: MSi4432 against the current Stipulated Standards. The RF Module has demonstrated compliance with the FCC 15.249: 2013.

EUT Information

EUT Description : RF Module

Main Model : MSi4432

Serial Model : N/A

Input Power : Host output to the module: DC 3.3V

Classification
Per Stipulated Test Standard : FCC 15.249: 2013

**SIEMIC, INC.**

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 6 of 36
www.siemic.com
www.siemic.com.cn

2 TECHNICAL DETAILS

Purpose	Compliance testing of RF Module with stipulated standard
Applicant / Client	EDMI (Shenzhen) Co., Ltd 5th Floor 5 Building 5, Zhong Yuntai Industrial Park, Tang Tou 1st Road, Shi Yan, Bao An, Shen Zhen, GuangDong 518108 P.R.China
Manufacturer	EDMI (Shenzhen) Co., Ltd 5th Floor 5 Building 5, Zhong Yuntai Industrial Park, Tang Tou 1st Road, Shi Yan, Bao An, Shen Zhen, GuangDong,518108,P.R.China.
Laboratory performing the tests	SIEMIC (Shenzhen-China) Laboratories Zone A, Floor 1, Building 2, Wan Ye Long Technology Park, South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong, China Tel: +86-0755-2601 4629 / 2601 4953 Fax: +86-0755-2601 4953-810 Email: China@siemic.com.cn
Test report reference number	14070483-FCC-R1
Date EUT received	September 5, 2014
Standard applied	FCC 15.249: 2013
Dates of test (from – to)	September 5 to October 14, 2014
No of Units	#1
Equipment Category	DXX
Trade Name	EDMI
RF Operating Frequency (ies)	903-927 MHz
Number of Channels	61
Modulation	GFSK
FCC ID	2AC6H4432-A



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 7 of 36
www.siemic.com
www.siemic.com.cn

3 MODIFICATION

NONE

**SIEMIC, INC.**

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 8 of 36
www.siemic.com
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4 TEST SUMMARY

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

Spread Spectrum System/Device

Test Results Summary

Description		Pass / Fail
§15.215(c)	20 dB Bandwidth&99% Occupied Bandwidth	Pass
§15.203	Antenna Requirement	Pass
§15.249(a)	Field Strength Measurement	Pass
§15.207(a)	Conducted Emissions	Pass
§15.205(a), §15.209(a), §15.249, §15.35.	Radiated Emissions(Tx)	Pass
§15.249(d)	Band-Edge	Pass



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 9 of 36
www.siemic.com
www.siemic.com.cn

5 MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

5.1 §15.203 – Antenna Requirement

Standard Requirement:

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.
- c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Antenna Connector Construction

The EUT has 1 antennas: a Spring antenna, the gain is -4 dBi

Which in accordance to section 15.203, please refer to the internal photos.

Test Result: Pass



5.2 §15.215(c) –20 dB Bandwidth&99% Occupied Bandwidth

Standard Requirement:

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed.

Procedures:

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel, $RBW \geq 1\%$ of the 20 dB bandwidth, $VBW \geq RBW$, Sweep = auto, Detector function = peak, Trace = max hold.
4. Set the measured low, middle and high frequency and test 20dB bandwidth with spectrum analyzer.

Test Result: Pass

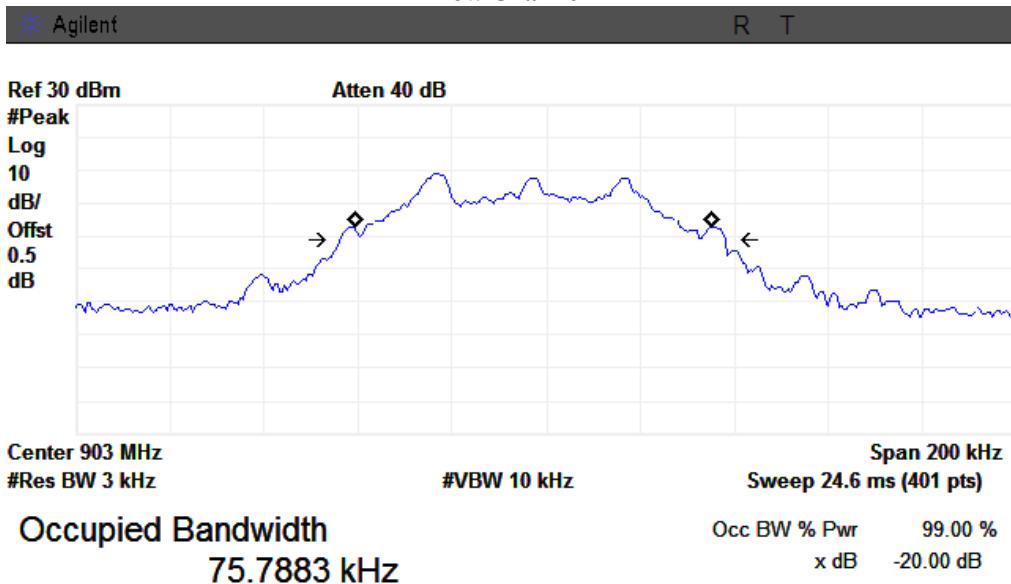
**SIEMIC, INC.**

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 11 of 36
www.siemic.com
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Test Mode:**Transmitting**

Channel	Frequency (MHz)	20dB Bandwidth (KHz)	99% Occupied Bandwidth (KHz)
Low	903	81.708	75.7883
Middle	915	81.583	77.5786
High	927	81.648	76.0442

The 20dB&99% bandwidth:**Low Channel**

Transmit Freq Error -2.802 kHz
x dB Bandwidth 81.708 kHz

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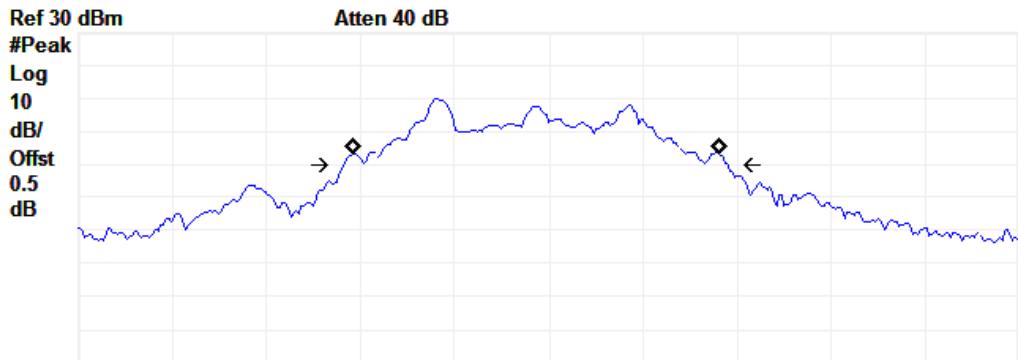
Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 12 of 36
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Middle Channel

Agilent

R T



Occupied Bandwidth

77.5786 kHz

Occ BW % Pwr 99.00 %
x dB -20.00 dB

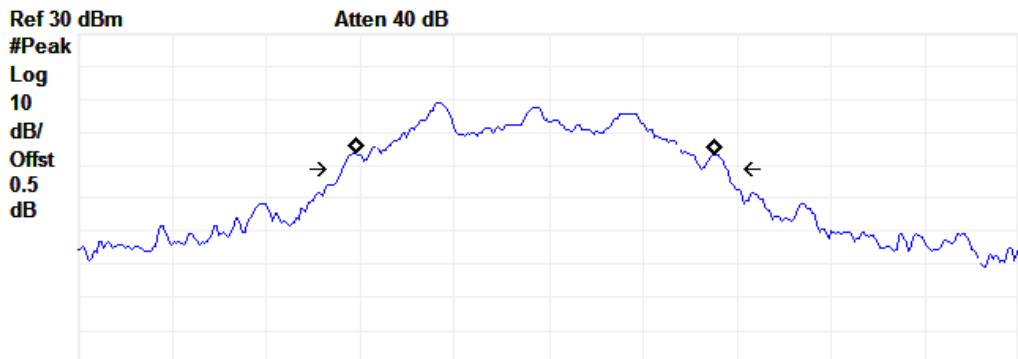
Transmit Freq Error
x dB Bandwidth

-2.666 kHz
81.583 kHz

High Channel

Agilent

R T



Occupied Bandwidth

76.0442 kHz

Occ BW % Pwr 99.00 %
x dB -20.00 dB

Transmit Freq Error
x dB Bandwidth

-3.120 kHz
81.648 kHz

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Addressing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 13 of 36
www.siemic.com
www.siemic.com.cn

5.3 § 15.249(a) – Field Strength Measurement

1. Radiated Measurement
EUT was set for low, mid, high channel with modulated mode and highest RF output power.
2. Radiated Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz – 40GHz is $\pm 1.5\text{dB}$.
3. Environmental Conditions

Temperature	23°C
Relative Humidity	54%
Atmospheric Pressure	1005mbar
4. Test date : September 27, 2014
Tested By : Herith Shi

Standard Requirement:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

Procedures:

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

Test Result: Pass

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Accessing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1

Issue Date: October 14, 2014

Page: 14 of 36

www.siemic.comwww.siemic.com.cn**Test Mode:****Transmitting****Fundamental Field Strength:**

Frequency (MHz)	S.A. Reading (dB μ V)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)
903	85.9	QP	H	22.5	0.9	22	87.3	94
903	85.7	QP	V	22.5	0.9	22	87.1	94
915	86.6	QP	H	22.5	0.9	22	88.0	94
915	85.1	QP	V	22.5	0.9	22	86.5	94
927	87.2	QP	H	22.5	0.9	22	88.6	94
927	84.9	QP	V	22.5	0.9	22	86.3	94

**SIEMIC, INC.**

Assessing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 15 of 36
www.siemic.com
www.siemic.com.cn

5.4 § 15.207(a) – Conducted emissions Test Result

Standard Requirement:

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

Procedures:

1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR and Average detectors, are reported. All other emissions were relatively insignificant.
2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
3. Conducted Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 9kHz – 30MHz (Average & Quasi-peak) is ± 3.5 dB.
4. Environmental Conditions
Temperature 24°C
Relative Humidity 55%
Atmospheric Pressure 1004mbar
5. Test date : September 25, 2014
Tested By : Herith Shi

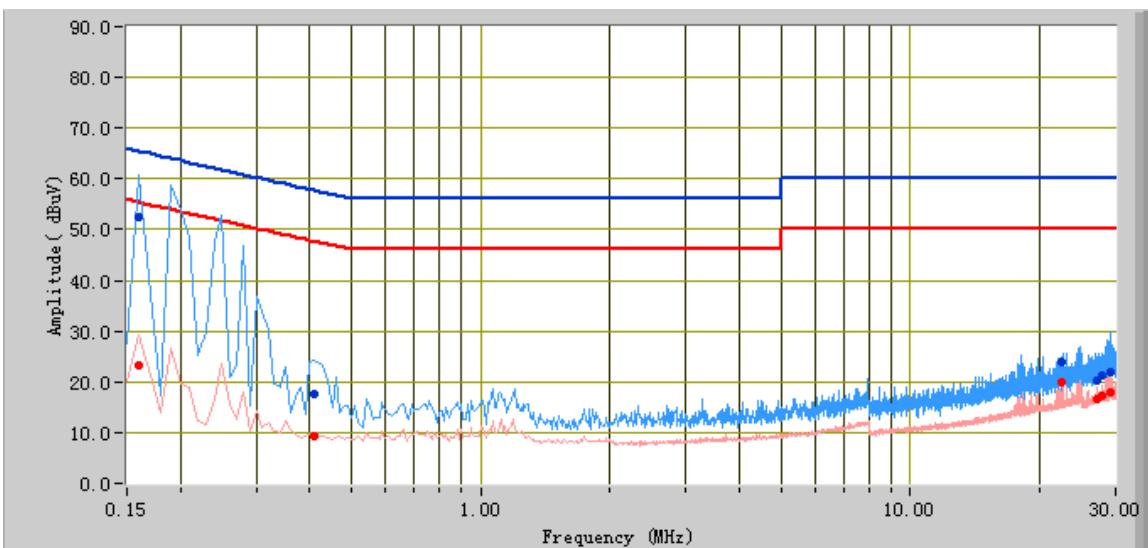
Test Result: Pass

**SIEMIC, INC.**

Accessing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 16 of 36
www.siemic.com
www.siemic.com.cn

Test Mode: Running**Peak Detector** **Quasi Peak Limit****Average Detector** **Average Limit****Test Data****Phase Line Plot at 120V AC, 60Hz**

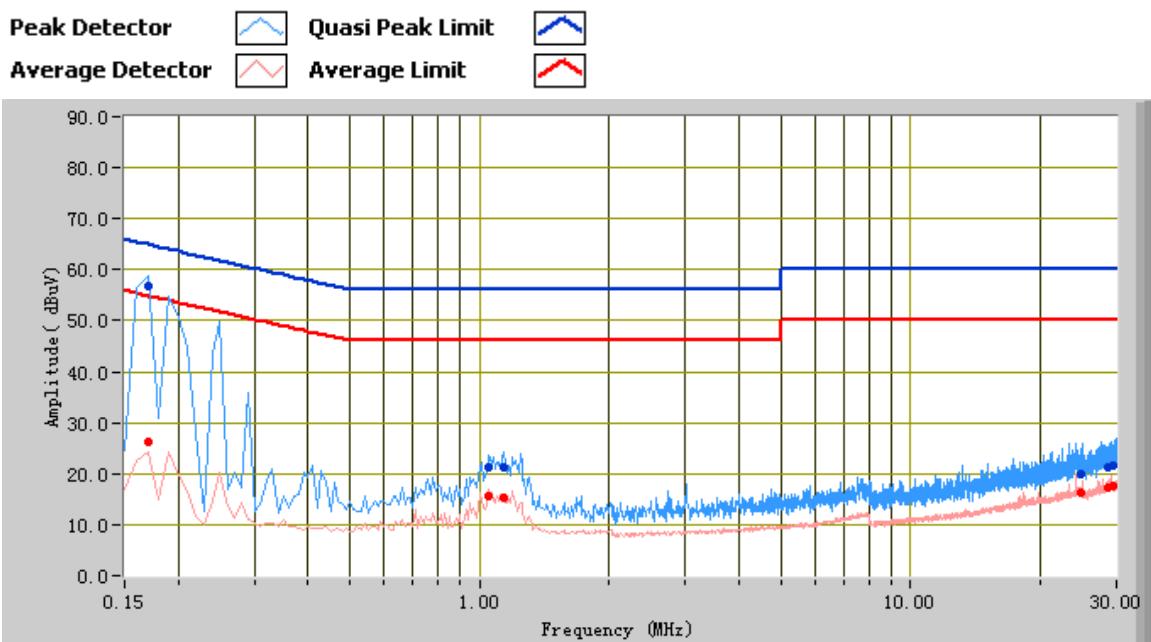
Frequency (MHz)	Quasi Peak (dBuV)	Limit (dBuV)	Margin (dB)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Factors (dB)
0.16	52.31	65.47	-13.15	23.26	55.47	-32.20	12.43
0.41	17.75	57.65	-39.90	9.33	47.65	-38.32	10.96
27.98	21.19	60.00	-38.81	17.20	50.00	-32.80	15.98
29.18	21.89	60.00	-38.11	17.90	50.00	-32.10	16.10
27.26	20.40	60.00	-39.60	16.61	50.00	-33.39	15.90
22.46	23.75	60.00	-36.25	19.94	50.00	-30.06	15.27

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 17 of 36
www.siemic.com
www.siemic.com.cn

Test Mode:**Running****Test Data****Phase Natural Plot at 120V AC, 60Hz**

Frequency (MHz)	Quasi Peak (dBuV)	Limit (dBuV)	Margin (dB)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Factors (dB)
0.17	56.87	64.96	-8.09	26.13	54.96	-28.83	12.35
1.14	21.13	56.00	-34.87	15.34	46.00	-30.66	10.29
1.05	21.21	56.00	-34.79	15.74	46.00	-30.26	10.28
29.42	21.60	60.00	-38.40	17.58	50.00	-32.42	16.14
28.70	21.20	60.00	-38.80	17.39	50.00	-32.61	16.06
24.86	19.88	60.00	-40.12	16.33	50.00	-33.67	15.60

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 18 of 36
www.siemic.com
www.siemic.com.cn

5.5 §15.209(a), §15.205(a)& §15.249 §15.35- Radiated Emissions (TX)

1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
3. Radiated Emissions Measurement Uncertainty
All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz – 1GHz (3m & 10m) & 1GHz above (3m) is +5.6/-4.5dB.
4. Environmental Conditions Temperature 20°C
 Relative Humidity 57%
 Atmospheric Pressure 1006mbar
5. Test date : September 29, 2014
Tested By : Herith Shi

Standard Requirement:

The emissions from the Low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges.

The spurious emission scanned frequency range is 30MHz – 25GHz.

Test Result: Pass

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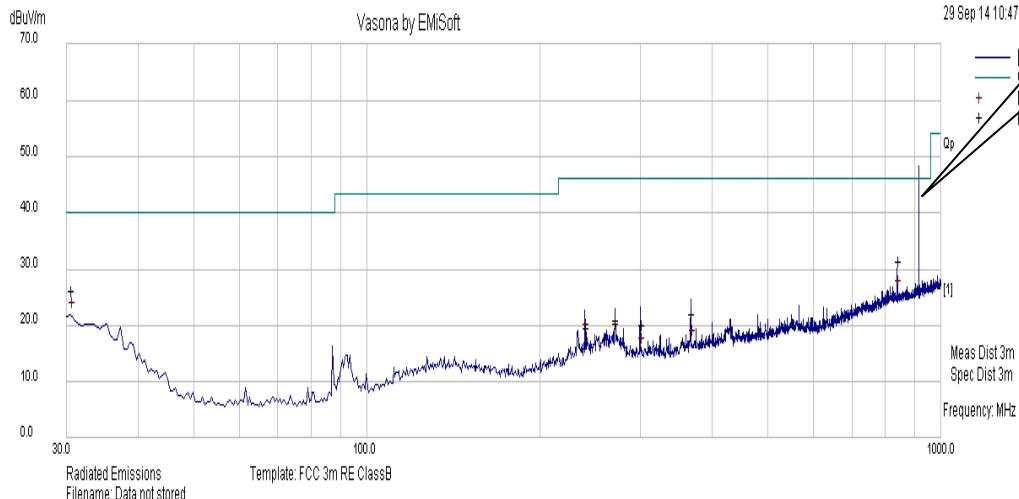
Addressing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 19 of 36
www.siemic.com
www.siemic.com.cn

Test Mode:**Transmitting*****Below 1GHz***

Peak Detector
Quasi Peak Limit



Test Data

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
30.6198	28.22	0.56	-2.61	26.17	Quasi Max	H	250	272	40	-13.83	Pass
241.244	26.69	1.61	-8.93	19.36	Quasi Max	H	175	110	46	-26.64	Pass
272.042	27.66	1.71	-8.65	20.72	Quasi Max	H	136	326	46	-25.28	Pass
302.081	26.52	1.8	-8.43	19.89	Quasi Max	H	102	20	46	-26.11	Pass
369.259	26.48	1.99	-6.55	21.91	Quasi Max	V	254	144	46	-24.09	Pass
844.956	27.29	3.04	1.05	31.39	Quasi Max	H	294	102	46	-14.61	Pass

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 20 of 36
www.siemic.com
www.siemic.com.cn

Test Mode:**Transmitting*****Above 1 GHz*****Low Channel (915 MHz)**

Frequency (MHz)	S.A. Reading (dB μ V)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Factor as desensitization (dB)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
1806	33.14	PK	V	27.5	1.8	24	0	38.44	74	-35.56
1806	32.89	PK	H	27.5	1.8	24	0	38.19	74	-35.81

Middle Channel (918.6 MHz)

Frequency (MHz)	S.A. Reading (dB μ V)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Factor as desensitization (dB)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
1830	32.66	PK	V	27.55	1.8	24	0	38.01	74	-35.99
1830	33.05	PK	H	27.55	1.8	24	0	38.4	74	-35.6

High Channel (918.6 MHz)

Frequency (MHz)	S.A. Reading (dB μ V)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Factor as desensitization (dB)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
1854	32.59	PK	V	27.6	1.8	24	0	37.99	74	-36.01
1854	33.17	PK	H	27.6	1.8	24	0	38.57	74	-35.43

Note: Because the Pk<54 dB μ V, it is not need to be test against in AV detector.

Spurious emissions in restricted band for FCC:

The Spurious Emission was checked in restricted band. No emissions were found and only noise floor.



5.6 § 15.249(d) – Band Edge

1. In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Section A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Tables 2 and 3 is not required.
2. Environmental Conditions Temperature 22°C
 Relative Humidity 57%
 Atmospheric Pressure 1005mbar
3. Test date : October 14, 2014
Tested By : Herith Shi

Procedures: (Radiated Method Only)

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT on the rotated table inside the anechoic chamber without connection to measurement instrument. Turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range. Repeat above procedures until all measured frequencies were complete.
3. Set band RBW=100 kHz, VBW=300 kHz with a convenient frequency span from band edge.
4. Find the highest point in edge frequency, and then calculated results.
5. Repeat above procedures until all measured frequencies were complete.

Test Result: Pass

Please refer to the following tables and plots.

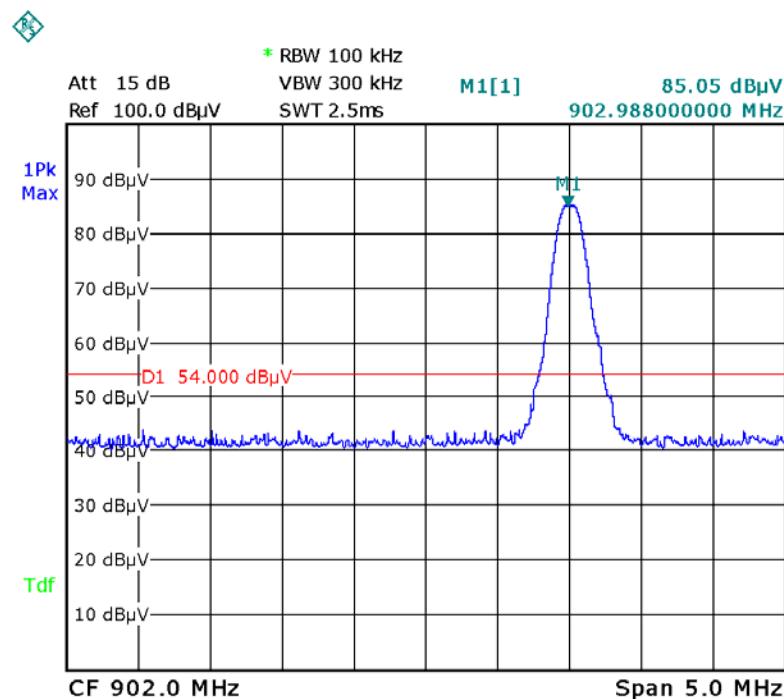


SIEMIC, INC.

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

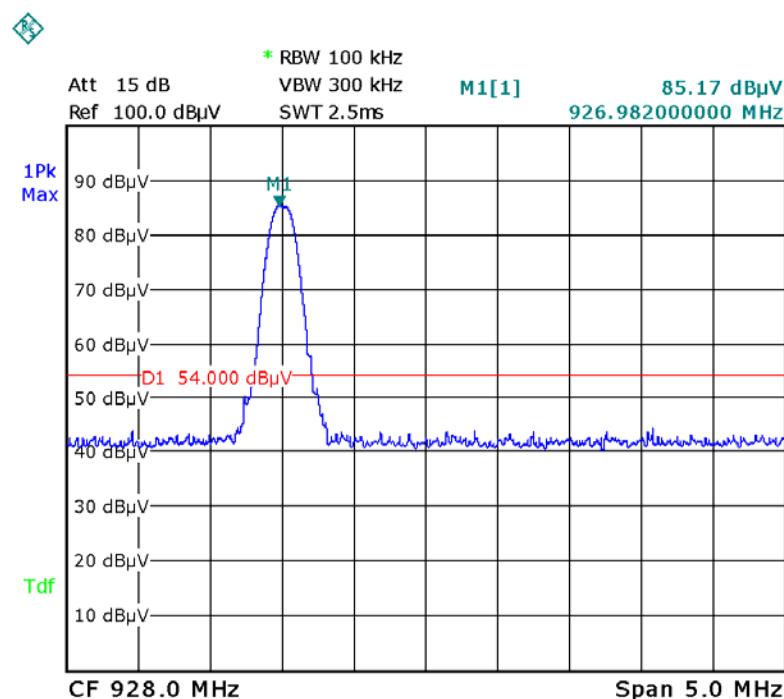
Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 22 of 36
www.siemic.com
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Band Edge, Low Channel



Date: 14.OCT.2014 16:26:36

Band Edge, High Channel



Date: 14.OCT.2014 16:29:07

Note: Because the Pk<54 dB μ V, it is not need to be test against in QP detector.

**SIEMIC, INC.**

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 23 of 36
www.siemic.com
www.siemic.com.cn

Annex A. TEST INSTRUMENT & METHOD

Annex A.i. TEST INSTRUMENTATION & GENERAL PROCEDURES

Instrument	Model	Serial #	Calibration Date	Calibration Due Date
AC Line Conducted Emissions				
EMI test receiver	ESCS30	8471241027	09/17/2014	09/16/2015
Line Impedance Stabilization Network	LI-125A	191106	09/27/2013	09/26/2014
Line Impedance Stabilization Network	LI-125A	191107	09/27/2013	09/26/2014
LISN	ISN T800	34373	09/27/2013	09/26/2014
RF conducted test				
Agilent ESA-E SERIES SPECTRUM ANALYZER	E4407B	MY45108319	09/17/2014	09/16/2015
Power Splitter	1#	1#	09/17/2014	09/16/2015
DC Power Supply	E3640A	MY40004013	09/17/2014	09/16/2015
Wireless Connectivity Test Set	N4010A	GB44440198	09/17/2014	09/16/2015
Radiated Emissions				
EMI test receiver	ESL6	100262	09/17/2014	09/16/2015
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	09/17/2014	09/16/2015
Microwave Preamplifier (0.5~18GHz)	PAM-118	443008	09/17/2014	09/16/2015
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/17/2014	09/16/2015
Double Ridge Horn Antenna	AH-118	71259	09/17/2014	09/16/2015



Annex A. ii. RADIATED EMISSIONS TEST DESCRIPTION

Limit

1. Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (mV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

2. In the above emission table, the tighter limit applies at the band edges.

Frequency (Hz)	Field Strength (µV/m at 3-meter)	Field Strength (dBµV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

EUT Characterisation

EUT characterisation, over the frequency range from 30MHz to 10th Harmonic, was done in order to minimise radiated emissions testing time while still maintaining high confidence in the test results.

The EUT was placed in the chamber, at a height of about 0.8m on a turntable. Its radiated emissions frequency profile was observed, using a spectrum analyzer /receiver with the appropriate broadband antenna placed 3m away from the EUT. Radiated emissions from the EUT were maximised by rotating the turntable manually, changing the antenna polarisation and manipulating the EUT cables while observing the frequency profile on the spectrum analyzer / receiver. Frequency points at which maximum emissions occurred, clock frequencies and operating frequencies were then noted for the formal radiated emissions test at the Open Area Test Site (OATS) or 3m EMC chamber.



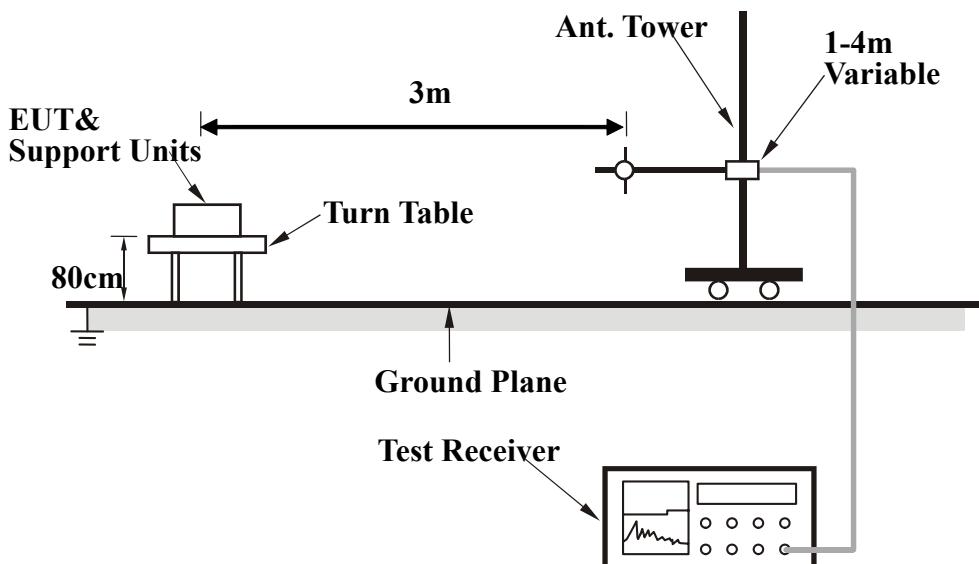
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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 25 of 36
www.siemic.com
www.siemic.com.cn

Test Set-up

1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m X 1.0m X 0.8m high, non-metallic table.
2. The filtered power supply for the EUT and supporting equipment were tapped from the appropriate power sockets located on the turntable.
3. The relevant broadband antenna was set at the required test distance away from the EUT and supporting equipment boundary.



Test Method

The following procedure was performed to determine the maximum emission axis of EUT:

1. With the receiving antenna is H polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
2. With the receiving antenna is V polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
3. Compare the results derived from above two steps. So, the axis of maximum emission from EUT was determined and the configuration was used to perform the final measurement.

Final Radiated Emission Measurement

1. Setup the configuration according to figure 1. Turn on EUT and make sure that it is in normal function.
2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.
3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ° to 360 ° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading.
5. Repeat step 4 until all frequencies need to be measured was complete.
6. Repeat step 5 with search antenna in vertical polarized orientations.

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 26 of 36
www.siemic.com
www.siemic.com.cn

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	Peak	100 kHz	100 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Description of Radiated Emissions Program

This EMC Measurement software run LabView automation software and offers a common user interface for electromagnetic interference (EMI) measurements. This software is a modern and powerful tool for controlling and monitoring EMI test receivers and EMC test systems. It guarantees reliable collection, evaluation, and documentation of measurement results. Basically, this program will run a pre-scan measurement before it proceeds with the final measurement. The pre-scan routine will run the scan on four different antenna heights, 2 antenna polarity, and 360 degrees table rotation. For example, the program was set to run 30 MHz to 1 GHz scan; the program will first start from a meter antenna height and divide the 30 MHz to 1 GHz into 10 separate parts of maximum hold sweeps. Each parts of maximum hold sweep, the program will collect the data from 0 degree to 360 degrees table rotation. After the program complete the 1m scan, the antenna continues to rise to 2m and continue the scan. The step will repeated for all specified antenna height and polarity. This program will perform the Quasi Peak measurement after the signal maximization process and pre-scan routine. The final measurement will be base on the pre-scan data reduction result.

Sample Calculation Example

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. For the limit is employed average value, therefore the peak value can be transferred to average value by subtracting the duty factor. The basic equation with a sample calculation is as follows:

$$\text{Peak} = \text{Reading} + \text{Corrected Factor}$$

where

$$\text{Corr. Factor} = \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain (if any)}$$

And the average value is

$$\text{Average} = \text{Peak Value} + \text{Duty Factor or}$$

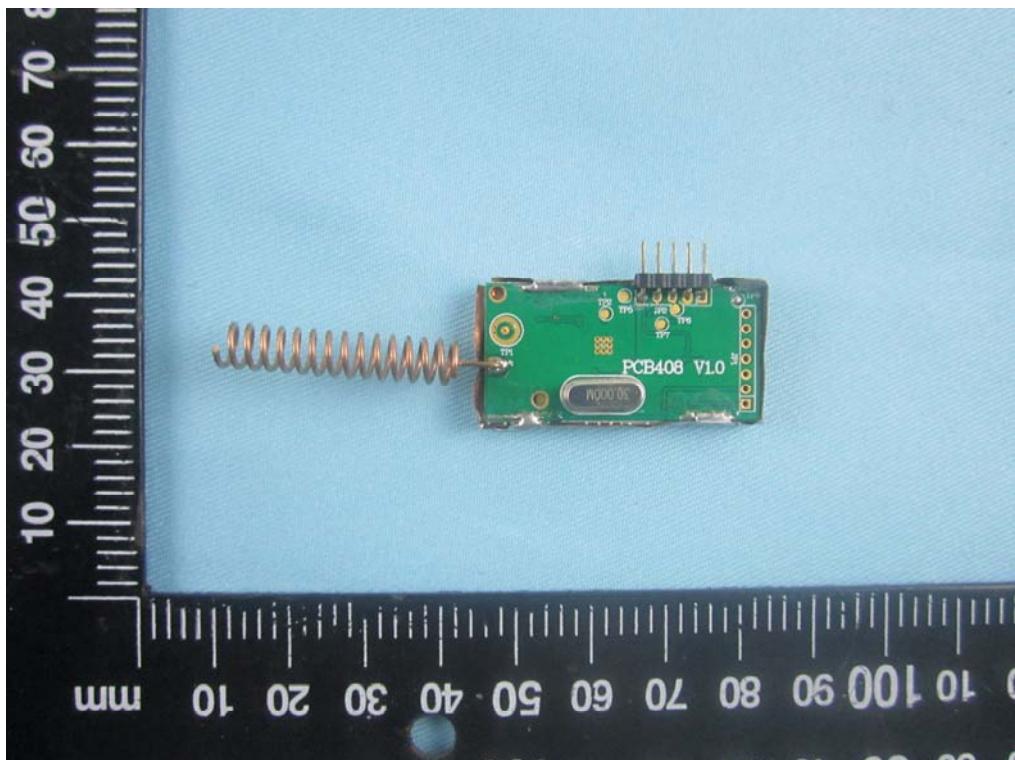
$$\text{Set RBW} = 1\text{MHz}, \text{VBW} = 10\text{Hz}.$$

Note:

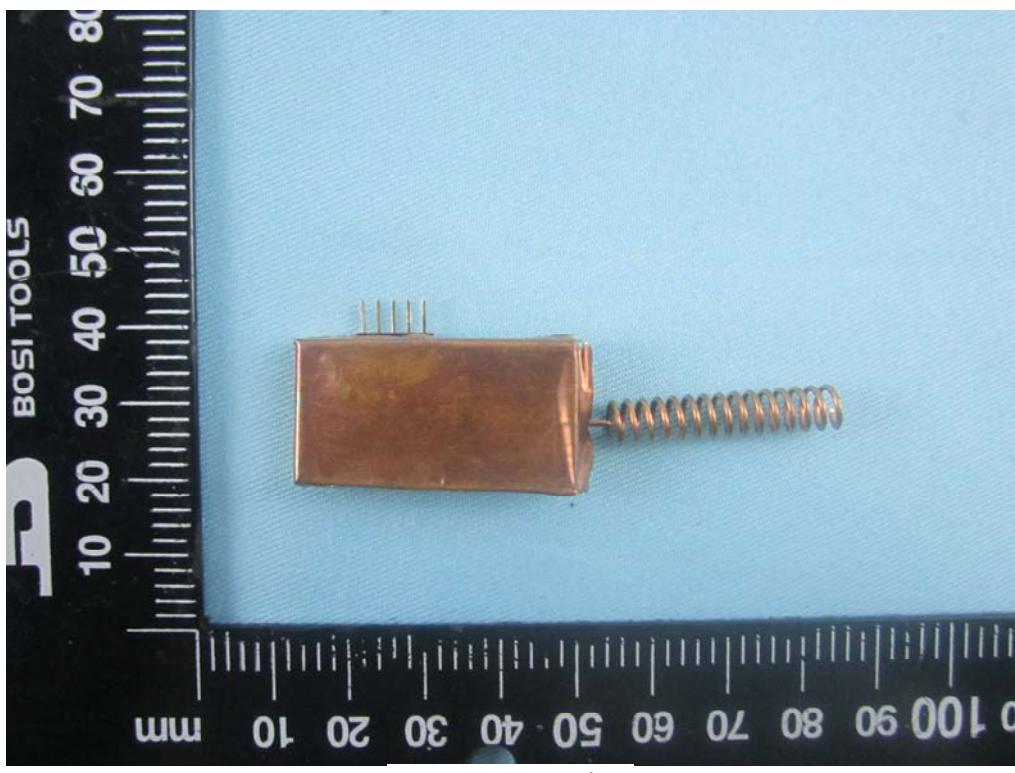
If the measured frequencies are fall in the restricted frequency band, the limit employed must be quasi peak value when frequencies are below or equal to 1 GHz. And the measuring instrument is set to quasi peak detector function.

Annex B. EUT AND TEST SETUP PHOTOGRAPHS

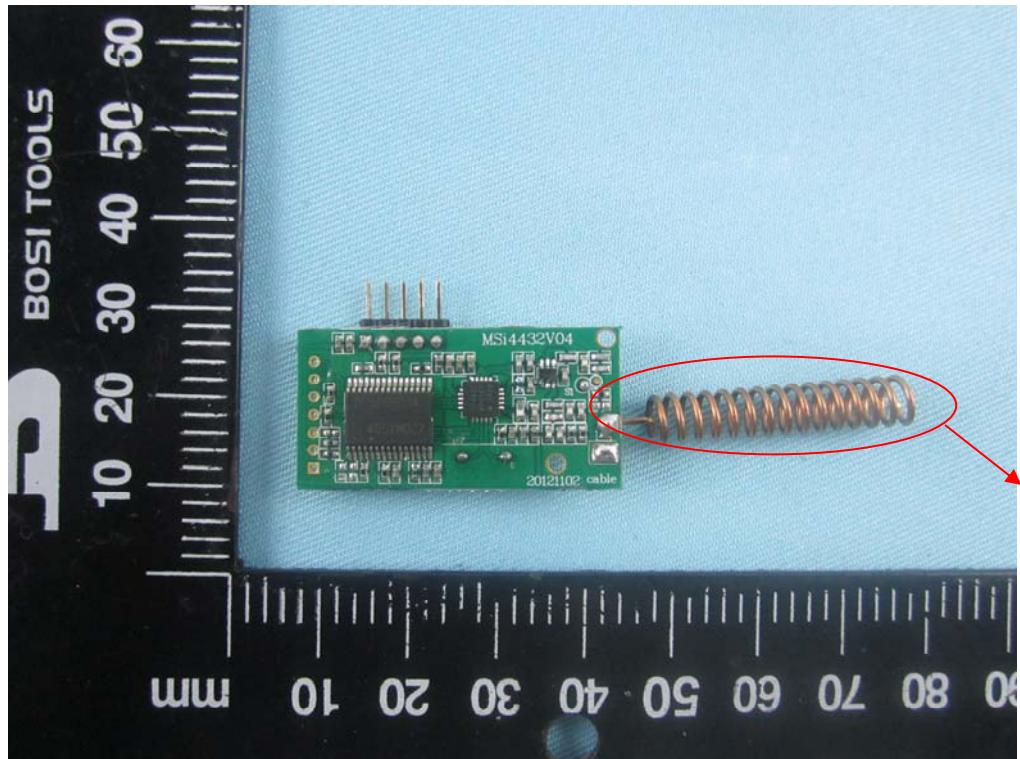
Annex B.i. Photograph 1: EUT External Photo



EUT-Top View



EUT-Bottom View

Annex B.i. Photograph 1: EUT Internal Photo

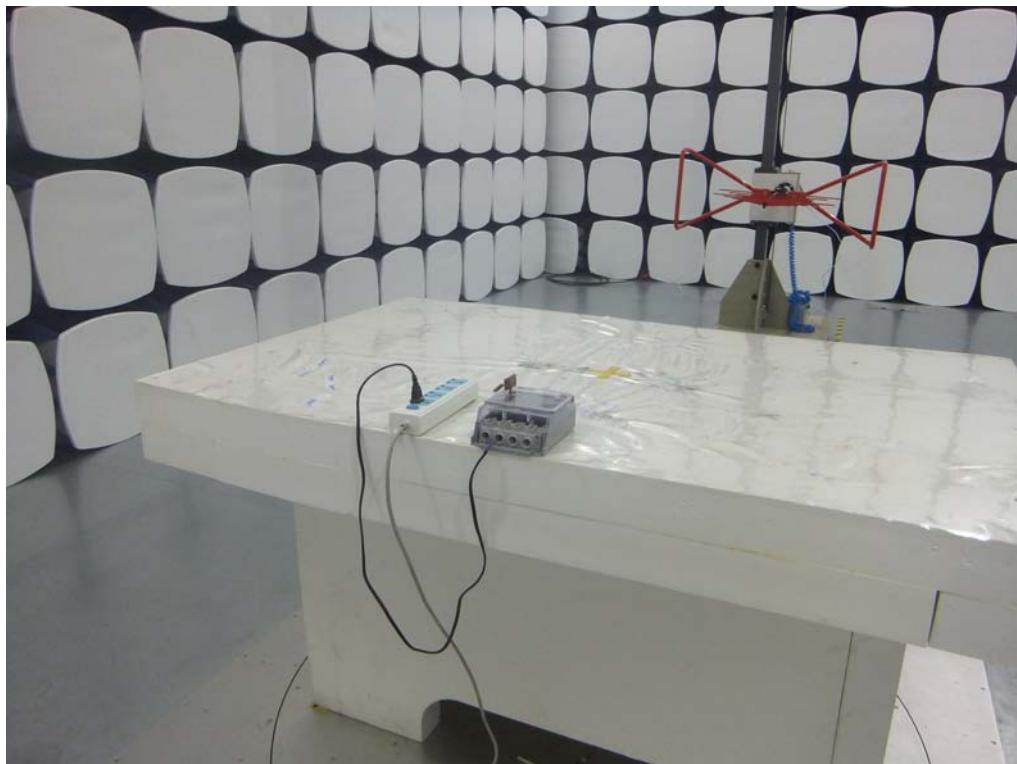
EUT Uncover-Top View

Annex B.iii. Photograph 2: Test Setup Photo

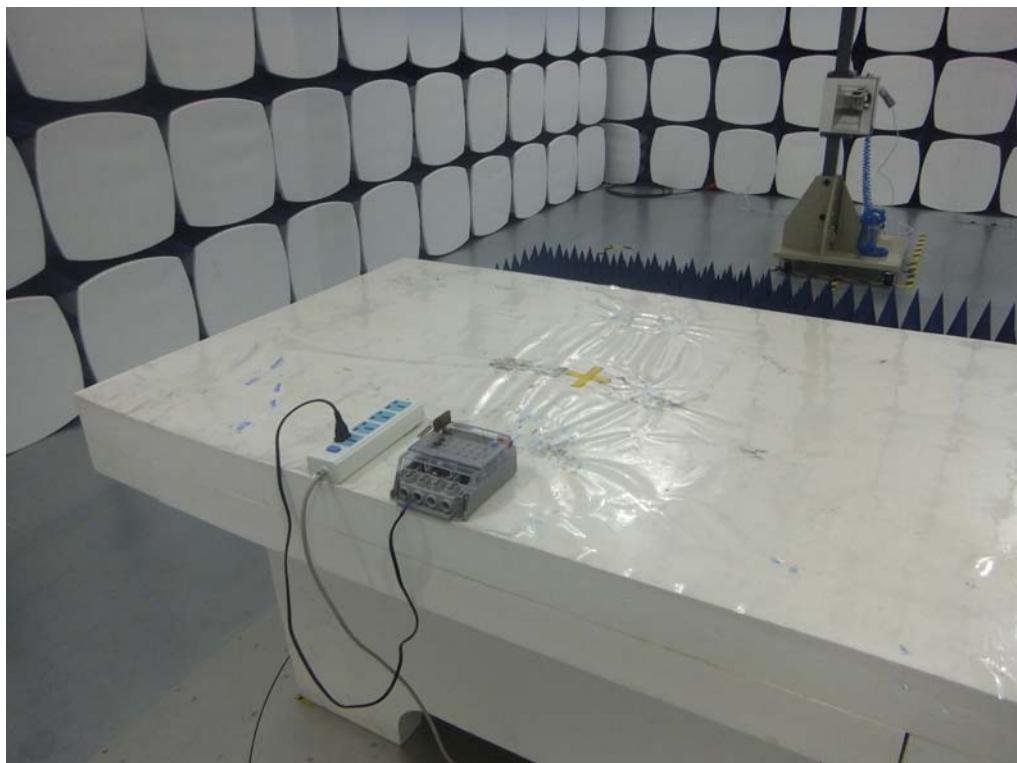
Conducted Emissions Test Setup Front View



Conducted Emissions Test Setup Side View



Radiated Spurious Emissions Test Setup Below 1GHz - Front View



Radiated Spurious Emissions Test Setup Above 1GHz –Front View

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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 31 of 36
www.siemic.com
www.siemic.com.cn

Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

EUT TEST CONDITIONS

Annex C. i. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Equipment Description (Including Brand Name)	Model & Serial Number	Cable Description (List Length, Type & Purpose)
digital electric meter	MK29F	N/A



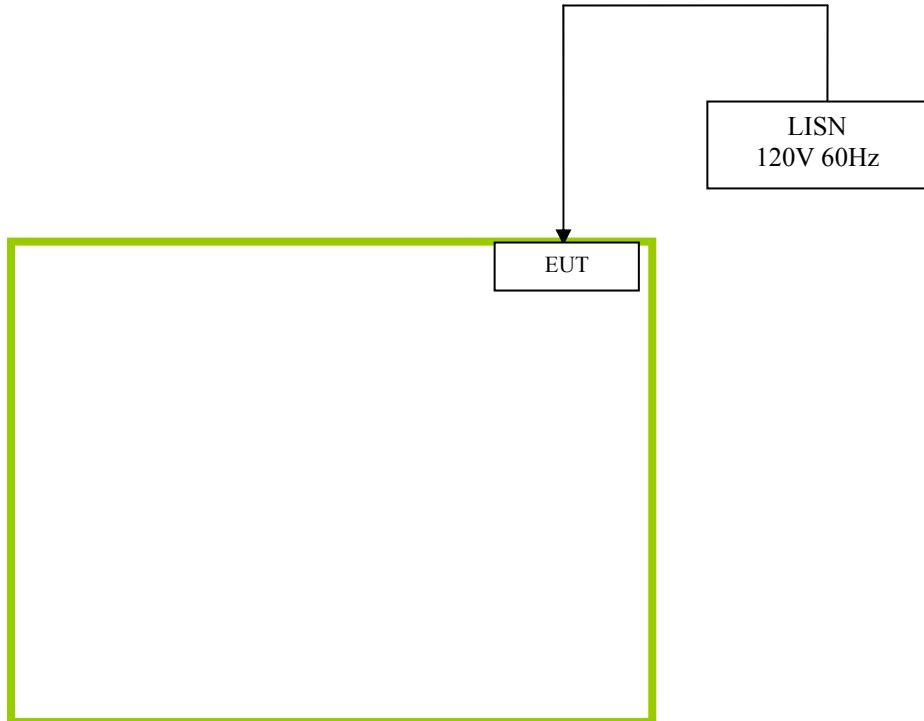
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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 32 of 36
www.siemic.com
www.siemic.com.cn

Block Configuration Diagram for Conducted Emissions





SIEMIC, INC.

Accessing global markets

Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1

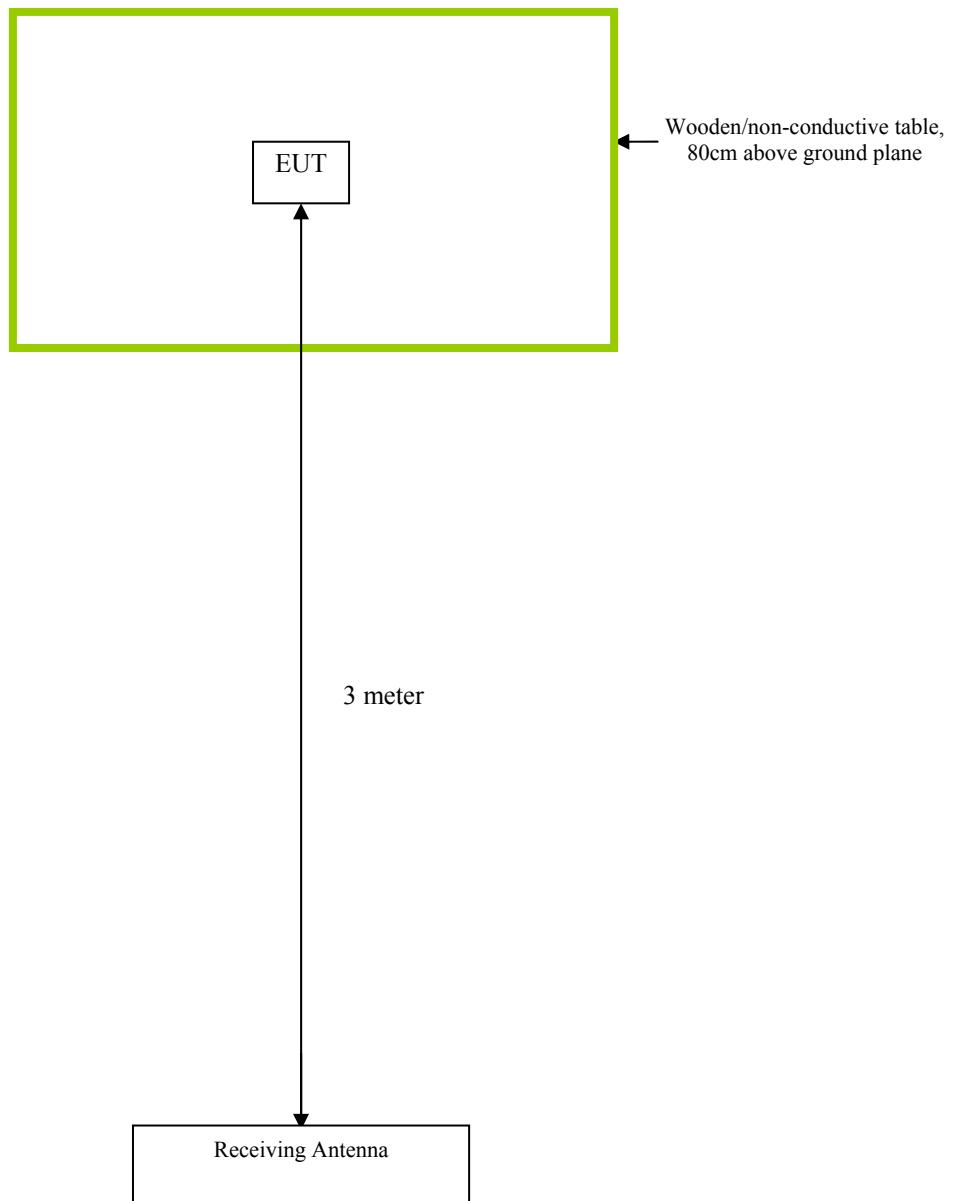
Issue Date: October 14, 2014

Page: 33 of 36

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Block Configuration Diagram for Radiated Emissions



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 34 of 36
www.siemic.com
www.siemic.com.cn

Annex C.ii. EUT OPERATING CONDITIONS

The following is the description of how the EUT is exercised during testing.

Test	Description Of Operation
Emissions Testing	The EUT was continuously transmitting to stimulate the worst case.



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 35 of 36
www.siemic.com
www.siemic.com.cn

Annex D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PART LIST

Please see attachment



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Title: RF Test Report for RF Module
Main Model: MSi4432
Serial Model: N/A
To: FCC 15.249: 2013

Report No: 14070483-FCC-R1
Issue Date: October 14, 2014
Page: 36 of 36
www.siemic.com
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Annex E. DECLARATION OF SIMILARITY

NONE