



FCC TEST REPORT

47 CFR FCC Part 15 Subpart B

Report Reference No.: TRE1308004402 R/C: 59454

FCC ID: PRM-T9007

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Date of issue: Aug 22, 2013

Testing Laboratory Name: Shenzhen Huatongwei International Inspection Co., Ltd

Address: Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China

Applicant's name: STAR COMPUTER GROUP INC.

Address: 2175 NW 115th Avenue, Miami FL 33172, USA

Test specification:

Standard: 47 CFR FCC Part 15 Subpart B - Unintentional Radiators
ANSI C63.4: 2009

TRF Originator: Shenzhen Huatongwei International Inspection CO., Ltd

Master TRF: Dated 2006-06

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Test item description: MID

Trade Mark: Argom

Model/Type reference: T9007

Listed Models: /

Manufacturer: STAR COMPUTER GROUP INC.

Rating: DC 5.0V adpater from AC 120V/60Hz

Android version: 4.0.4

Hardware version: V0.12

Software version: 4.1.1

Result: Positive

T E S T R E P O R T

Test Report No. : TRE1308004402	Aug 22, 2013
	Date of issue

Equipment under Test : MID

Model /Type : T9007

Listed Models : /

Applicant : **STAR COMPUTER GROUP INC.**

Address : 2175 NW 115th Avenue, Miami FL 33172, USA

Manufacturer : **STAR COMPUTER GROUP INC.**

Address : 2175 NW 115th Avenue, Miami FL 33172, USA

Test Result according to the standards on page 4:	Positive
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

[47 CFR FCC Part 15 Subpart B](#) - Unintentional Radiators

[ANSI C63.4: 2009](#) – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40GHz

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Aug 14, 2013
Testing commenced on	:	Aug 14, 2012
Testing concluded on	:	Aug 22, 2012

2.2. Equipment Under Test

Power supply system utilised

Power supply voltage	:	<input type="radio"/> 120V / 60 Hz	<input type="radio"/> 115V / 60Hz
		<input type="radio"/> 12 V DC	<input type="radio"/> 24 V DC
		<input checked="" type="radio"/> Other (specified in blank below)	

DC 5.0V adapter from AC120V/60Hz

2.3. Short description of the Equipment under Test (EUT)

2.4GHz (MID (M/N:T9007))

For more details, refer to the user's manual of

the EUT. Serial number: Prototype

2.4. EUT operation mode

The EUT has been tested under typical operating condition.

2.5. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: PRM-T9007** filing to comply with the FCC Part 15, Subpart B Rules.

2.6. Modifications

No modifications were implemented to meet testing criteria.

2.7. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

<input type="radio"/> Power Cable	Length (m) :	/
	Shield :	/
	Detachable :	/
<input type="radio"/> Multimeter	Manufacturer :	/
	Model No. :	/

● AC Adapter

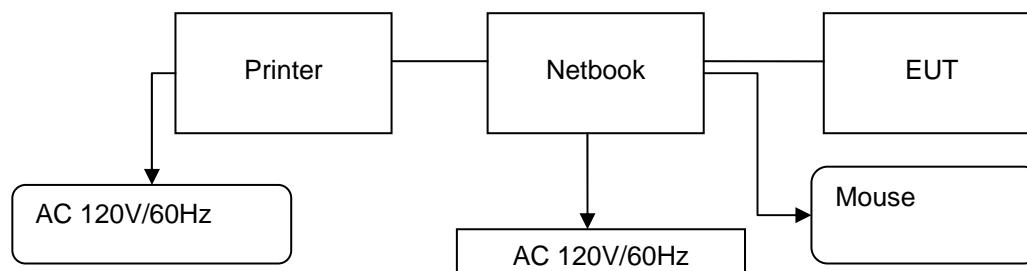
MODEL:JK-009

INPUT:100-240V~50/60Hz 0.3A Max

OUTPUT: 5.0V DC 2.0A

Power Cable: 60cm

◇ Shielded ◆ Unshielded

2.8. Configuration of Tested System**Configuration of Tested System****Equipment Used in Tested System**

No.	Equipment	Manufacturer	Model No.	Serial No.	Length	shielded/unshielded	Notes
1	Netbook	ASUS	n43s	B7N0BC257930294	/	/	DOC
2	Printer	ESPOn	C3990	C3990A	/	/	DOC
3	Mouse	ASUS	UX300	N/A	1.00m	unshielded	DOC
4	USB Cable (EUT to PC)	Genshuo	USB 2.0	N/A	0.60m	unshielded	N/A
5	USB Cable (Printer to PC)	Genshuo	USB 2.0	N/A	1.20m	unshielded	N/A
6	Power line (Printer)	/	/	N/A	1.00m	unshielded	N/A
7	Power Adapter (PC)	HIPRO	HP-A0904A 3	F111207091666404	1.50m	unshielded	N/A

2.9. NOTE

- The EUT is MID with WLAN function, The functions of the EUT listed as below:

	Test Standards	Reference Report
WLAN 802.11b/g/n	FCC Part 15 Subpart C	TRE1308004401
USB Port	FCC Part 15 Subpart B	TRE1308004402
MPE REPORT	FCC Per 47 CFR 2.1093(d)	TRE1308004403

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Huatongwei International Inspection Co., Ltd
Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
Phone: 86-755-26715686 Fax: 86-755-26748089

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2003) and CISPR Publication 22.

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: Mar. 29, 2012. Valid time is until Feb. 28, 2015.

A2LA-Lab Cert. No. 2243.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until Sept. 30, 2013.

FCC-Registration No.: 662850

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 662850, Renewal date June. 01, 2012, valid time is until June. 01, 2015.

IC-Registration No.: 5377A

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Jan. 25, 2011, valid time is until Jan. 24, 2014.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI

The 3m Semi-anechoic chamber (12.2m×7.95m×6.7m) and Shielded Room (8m×4m×3m) of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2010. Valid time is until Dec. 23, 2013.

Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: Dec. 20, 2009. Valid time is until Dec. 19, 2012.

Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2010. Valid time is until May 06, 2013.

DNV

Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups

according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2013.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24 dB	(1)
Radiated Emission	1~18GHz	5.16 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.39 dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5. Equipments Used during the Test

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI TEST RECEIVER	Rohde & Schwarz	ESCI	100106	2012/10/27
2	ARTIFICIAL MAINS	Rohde & Schwarz	ESH2-Z5	100028	2012/10/27
3	PULSE LIMITER	Rohde & Schwarz	ESHSZ2	100044	2012/10/27
4	EMI TEST SOFTWARE	Rohde & Schwarz	ES-K1	N/A	N/A

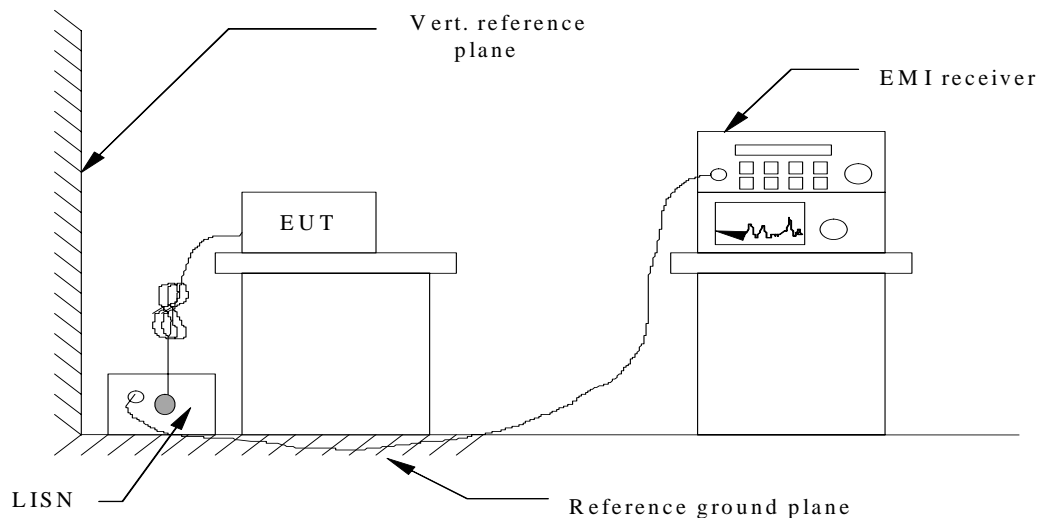
Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	ULTRA-BROADBAND ANTENNA	ShwarzBeck	VULB9163	538	2012/10/27
2	EMI TEST RECEIVER	Rohde & Schwarz	ESI 26	100009	2012/10/27
3	EMI TEST SOFTWARE	Audix	E3	N/A	N/A
4	TURNTABLE	MATURO	TT2.0	----	N/A
5	ANTENNA MAST	MATURO	TAM-4.0-P	----	N/A
6	EMI TEST SOFTWARE	Rohde & Schwarz	ESK1	N/A	N/A
7	HORN ANTENNA	ShwarzBeck	9120D	1011	2012/10/27
8	Amplifier	Sonoma	310N	E009-13	2012/10/27
9	JS amplifier	Rohde & Schwarz	JS4-00101800-28-5A	F201504	2012/10/27

The calibration interval was one year.

4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4-2009.
2. Support equipment, if needed, was placed as per ANSI C63.4-2009.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4-2009.
4. The EUT received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

CONDUCTED POWER LINE EMISSION LIMIT

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following :

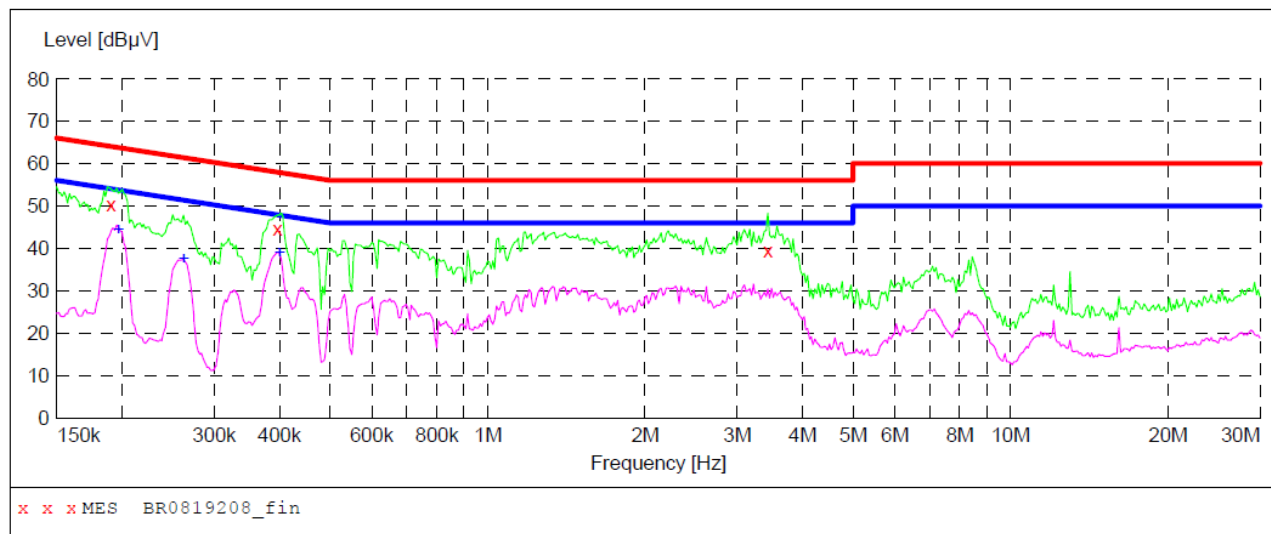
Frequency (MHz)	Maximum RF Line Voltage (dB μ V)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

TEST RESULTS

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "BR0819208_fin"**

8/19/2013 5:14PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.190505	50.50	9.9	64	13.5	QP	N	GND
0.396529	44.80	9.9	58	13.1	QP	N	GND
3.436212	39.50	10.1	56	16.5	QP	N	GND

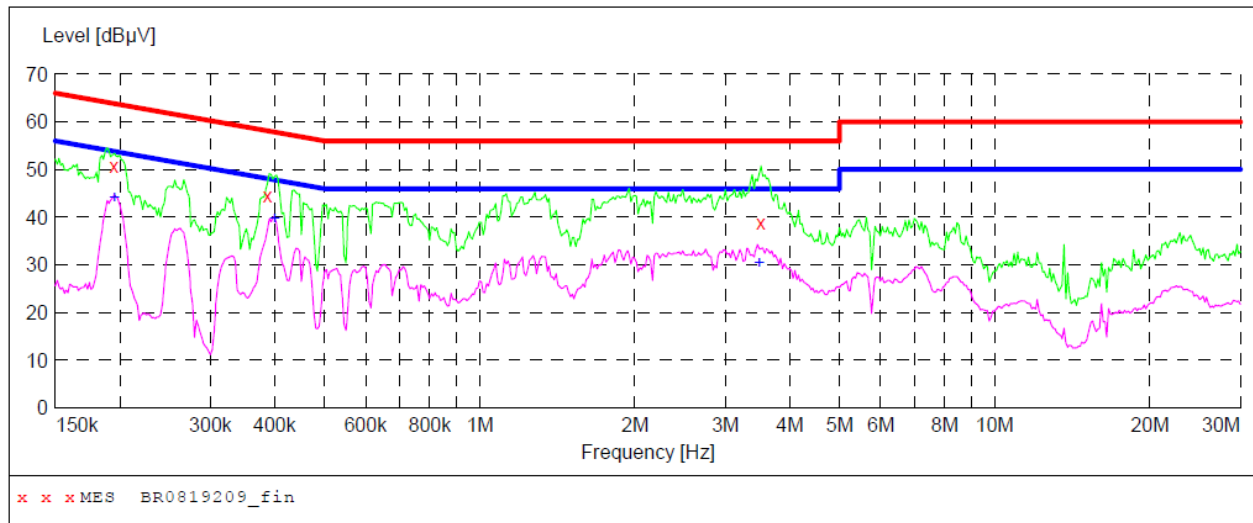
MEASUREMENT RESULT: "BR0819208_fin2"

8/19/2013 5:14PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.196675	44.50	9.9	54	9.2	AV	N	GND
0.262016	37.50	9.9	51	13.9	AV	N	GND
0.399693	38.90	9.9	48	9.0	AV	N	GND

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "BR0819209_fin"**

8/19/2013 5:18PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195114	50.80	9.9	64	13.0	QP	L1	GND
0.387157	44.60	9.9	58	13.5	QP	L1	GND
3.519341	38.80	10.1	56	17.2	QP	L1	GND

MEASUREMENT RESULT: "BR0819209_fin2"

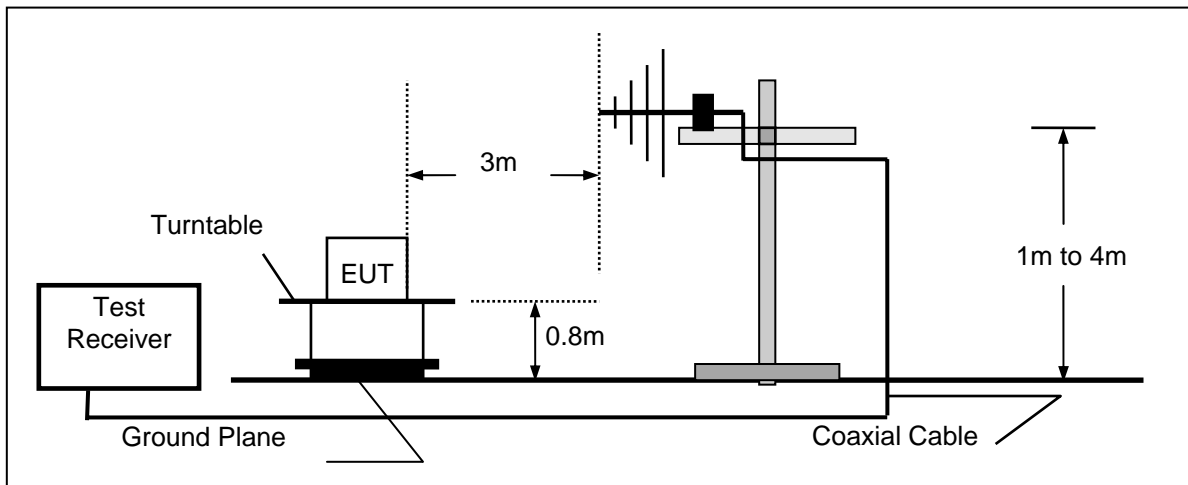
8/19/2013 5:18PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.195114	44.30	9.9	54	9.5	AV	L1	GND
0.399701	39.90	9.9	48	8.0	AV	L1	GND
3.491410	30.60	10.1	46	15.4	AV	L1	GND

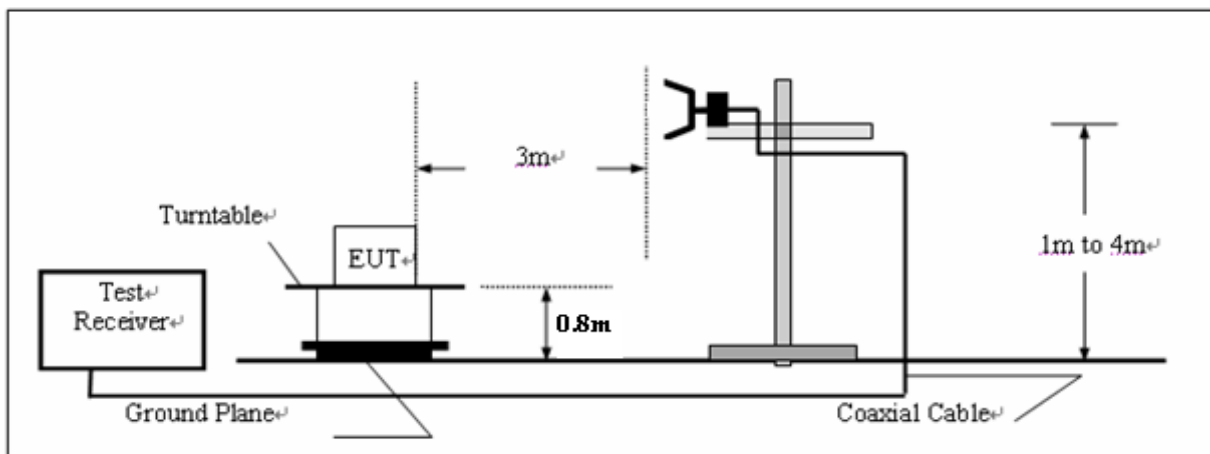
4.2. Radiated Emission Test

TEST CONFIGURATION

a) Radiated Emission Test Set-Up, Frequency below 1000MHz



b) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The maximum operation frequency was 512MHz, the radiated emission test frequency from 30MHz to 6GHz.

FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

For example

Frequency (MHz)	FS (dBμV/m)	RA (dBμV/m)	AF (dB)	CL (dB)	AG (dB)	Transd (dB)
300.00	40	58.1	12.2	1.6	31.90	-18.1

$$\text{Transd} = \text{AF} + \text{CL} - \text{AG}$$

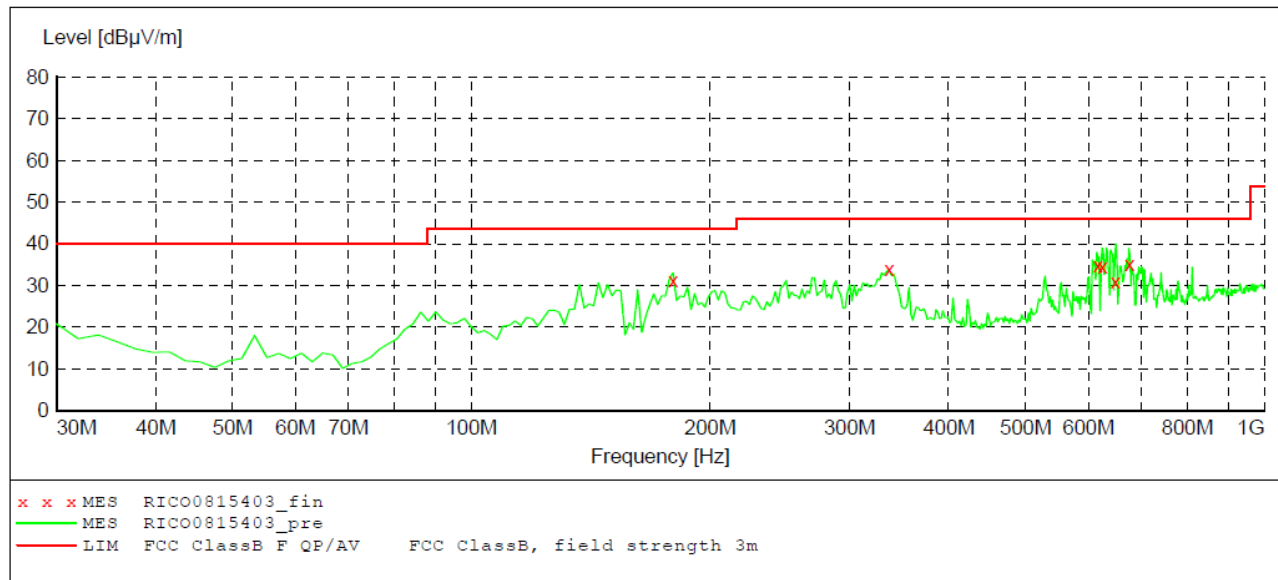
RADIATION LIMIT

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST RESULTS**SCAN TABLE: "test Field(30M-1G)QP"**

Short Description: Field Strength(30M-1G)
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 30.0 MHz 1.0 GHz 60.0 kHz QuasiPeak 1.0 s 120 kHz HL562 201106

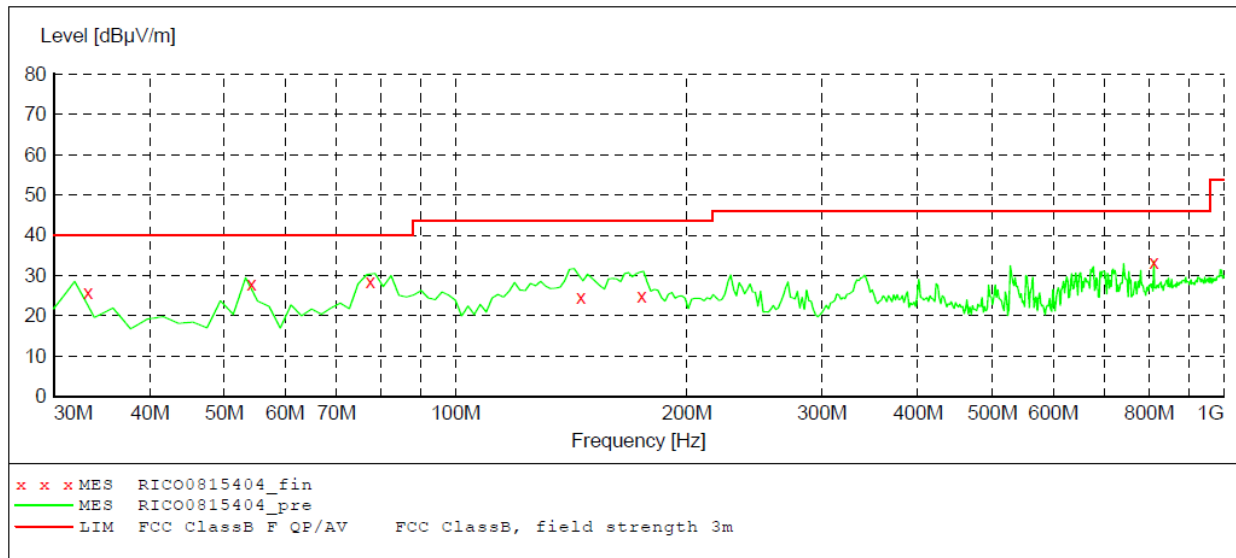
**MEASUREMENT RESULT: "RICO0815403_fin"**

8/15/2013 6:01PM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
179.700000	31.30	-20.5	43.5	12.2	QP	150.0	225.00	HORIZONTAL
336.780000	33.90	-14.6	46.0	12.1	QP	99.0	243.00	HORIZONTAL
617.340000	34.70	-9.3	46.0	11.3	QP	101.0	155.00	HORIZONTAL
625.620000	34.50	-9.0	46.0	11.5	QP	99.0	192.00	HORIZONTAL
649.140000	31.00	-8.4	46.0	15.0	QP	100.0	126.00	HORIZONTAL
676.020000	35.10	-7.5	46.0	10.9	QP	100.0	159.00	HORIZONTAL

SCAN TABLE: "test Field(30M-1G)QP"

Short Description:			Field Strength(30M-1G)			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
Frequency	Frequency	Width				
30.0 MHz	1.0 GHz	60.0 kHz	QuasiPeak	1.0 s	120 kHz	HL562 201106

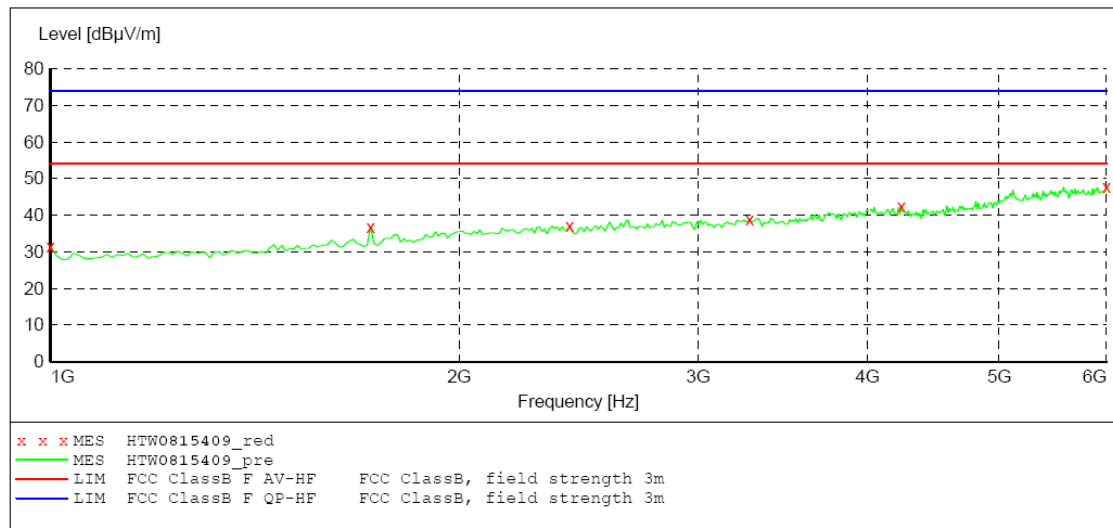
**MEASUREMENT RESULT: "RICO0815404_fin"**

8/15/2013 6:15PM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.240000	25.70	-11.7	40.0	14.3	QP	118.0	159.00	VERTICAL
54.300000	27.90	-22.1	40.0	12.1	QP	100.0	300.00	VERTICAL
77.520000	28.60	-20.5	40.0	11.4	QP	100.0	25.00	VERTICAL
145.740000	24.70	-20.8	43.5	18.8	QP	100.0	275.00	VERTICAL
174.900000	25.00	-21.2	43.5	18.5	QP	100.0	155.00	VERTICAL
811.440000	33.30	-5.6	46.0	12.7	QP	100.0	295.00	VERTICAL

SWEEP TABLE: "test (1G-18G) P"

Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011

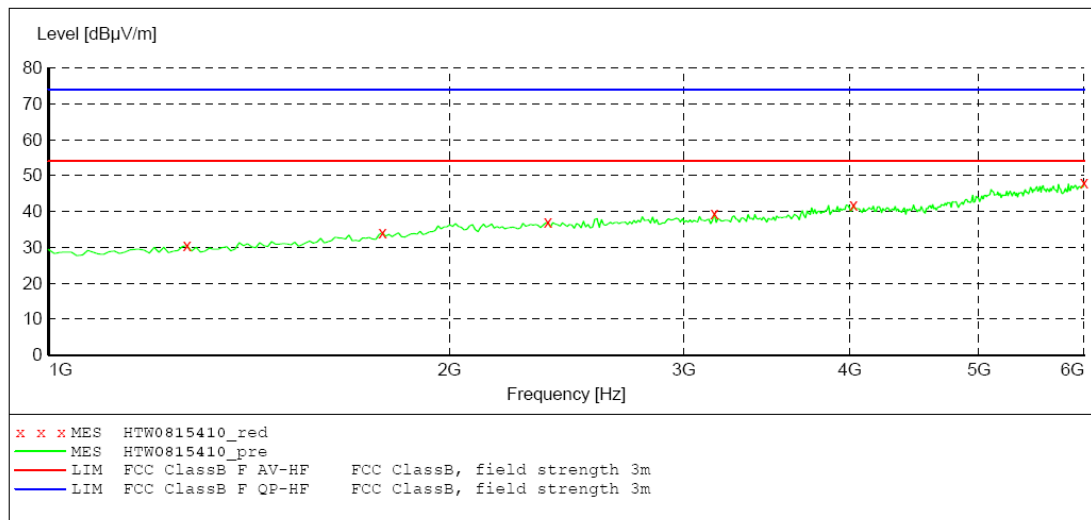
***MEASUREMENT RESULT: "HTW0815409_red"***

8/15/2013 4:53PM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1000.000000	31.40	-12.3	54.0	22.6	Peak	100.0	59.00	HORIZONTAL
1721.442886	36.80	-8.4	54.0	17.2	Peak	100.0	196.00	HORIZONTAL
2412.825651	37.10	-4.9	54.0	16.9	Peak	100.0	26.00	HORIZONTAL
3274.549098	38.90	-2.9	54.0	15.1	Peak	100.0	92.00	HORIZONTAL
4236.472946	42.50	-0.5	54.0	11.5	Peak	100.0	0.00	HORIZONTAL
6000.000000	47.90	2.6	54.0	6.1	Peak	100.0	48.00	HORIZONTAL

SWEEP TABLE: "test (1G-18G) P"

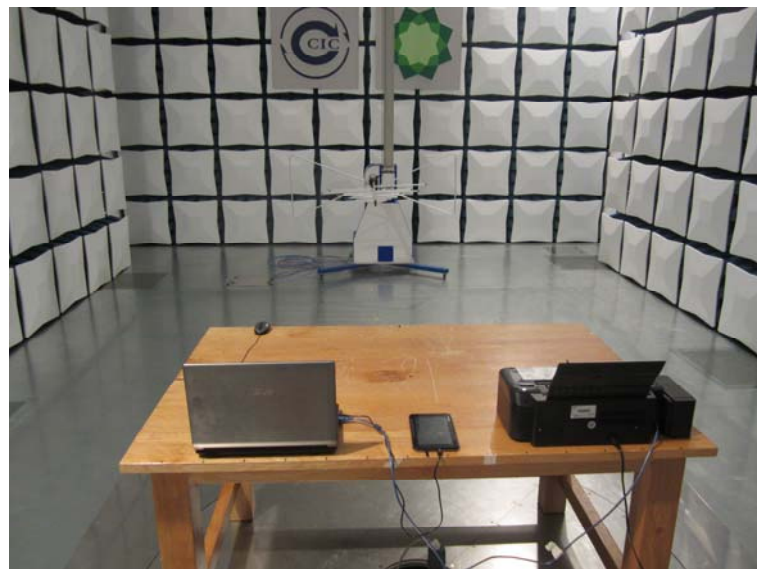
Short Description:		Field Strength			
Start	Stop	Detector	Meas.	IF	Transducer
Frequency	Frequency		Time	Bandw.	
1.0 GHz	18.0 GHz	MaxPeak	Coupled	1 MHz	HF906 2011

**MEASUREMENT RESULT: "HTW0815410_red"**

8/15/2013 4:54PM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1270.541082	30.50	-11.0	54.0	23.5	Peak	100.0	358.00	VERTICAL
1781.563126	34.10	-8.0	54.0	19.9	Peak	100.0	59.00	VERTICAL
2372.745491	37.00	-5.1	54.0	17.0	Peak	100.0	18.00	VERTICAL
3164.328657	39.50	-3.0	54.0	14.5	Peak	100.0	258.00	VERTICAL
4026.052104	41.90	-0.4	54.0	12.1	Peak	100.0	196.00	VERTICAL
6000.000000	48.20	2.6	54.0	5.8	Peak	100.0	172.00	VERTICAL

5. Test Setup Photos of the EUT





.....End of Report.....