



FCC TEST REPORT

CERTIFICATION

according to

47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device

Equipment : 7" Tablet PC

Model No. : QMV7A

FCC ID : HFS-QMV7A

Filing Type : Certification

Applicant : **Quanta Computer Inc.**
211, Wen Hwa 2nd Rd., Kuei Shan,
Tao Yuan 33377, Taiwan

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SPORTON International Inc.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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History of this test report

Original Report Issue Date: Sep. 10, 2013

No additional attachment.

Additional attachments were issued as following record:

Report No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE

CERTIFICATION

according to

47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device

Equipment : 7" Tablet PC

Model No. : QMV7A

FCC ID : HFS-QMV7A

Applicant : **Quanta Computer Inc.**
211, Wen Hwa 2nd Rd., Kuei Shan,
Tao Yuan 33377, Taiwan

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4-2009** and the energy emitted by this equipment was **passed CISPR PUB. 22 and FCC Part 15 Subpart B** in both radiated and conducted emission **Class B** limits.

The product sample received on **Aug. 26, 2013** and completely tested on **Aug. 29, 2013** at **SPORTON International Inc. LAB.**



Kero Kuo
Engineering Supervisor

SPORTON International Inc.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1 Applicant

Quanta Computer Inc.
211, Wen Hwa 2nd Rd., Kuei Shan, Tao Yuan 33377, Taiwan

1.2 Manufacturer

Same 1.1

1.3 Basic Description of Equipment under Test

Equipment : 7" Tablet PC
Model No. : QMV7A
Trade Name : Verizon
Power Supply Type : 1. Switching
 2. From Battery
AC Power Cord : Wall-mount, 2 pin
DC Power Cable : D-Shielded, 1.0m, 2 pin (USB connector type)
The maximum operating frequency is 2.4GHz

1.4 Feature of Equipment under Test

	QMV7A, LTE Version
CPU	MTK MT8125 quad core ,1.2GHz
System Memory	micron/MT41K256M16HA-125:E
LCD	Innolux/N070ICN (7"W TFT , IPS , 1280 x 800, MIPI interface)
Touch Screen	O-Film/MCF-070-1071-01
Storage	sandisk/SDIN7DP2-8G
G Sensors	BOSCH/CX5032GB12000H0PHSZZ
Ambient Light Sensor	Capella/CM3218A3OP-AD
Gyro	Yes
Digital Compass	Yes
I/O	3.5mm Headphone-out & Mic-in combo jack x 1
	Micro USB x 1 (support PC connection and DC-in charge)
	Micro SD card (up to 32GB)
	Micro-SIM card for LTE
Switch	One Power switch for Power on off / Suspend / Resume ; 2 Volume keys for Volume +
WLAN/Bluetooth	Mediatek/MT6628QP
GPS	Mediatek/MT6628QP
Modem Connection	Quanta Li170
Antenna	wifi/BT, GPS ,LTE x 2
Front Camera	ShenZhen Kingcome/G5PV-MV7AFHQ
Rear Camera	LITE-ON,13P2BF305
Speakers	Stereo speakers 0.5W x 2
Microphone	Internal MIC x 1, digital type
Adapter	PI Electronics / AD83531 Input: 100-240V ~ 50/60Hz 0.3A Output: 5V 2A
Operating System	Android 4.2.2
Battery	McNair / MLP3970125 Power Rating: 3.7V / 4000mAh / 14.8Wh
Target Dimension	196mm x 125.5mm x 10.25mm
Estimated Weight	Under 360g

Please refer to user's manual.

2. Test Configuration of Equipment under Test

2.1 Test Manner

- a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2009 and configuration operated in a manner which tended to maximize its emission characteristics in a typical application.
- b. The complete test system included remote workstation, Earphone, Micro SD Card, SIM Card and EUT for EMI test. The remote workstation included AP and Base Station. **(For conducted emission test)**
- c. The complete test system included remote workstation, PC, LCD Monitor, Modem, Printer, USB Keyboard, USB Mouse, Earphone, Micro SD Card, SIM Card, and EUT for EMI. The remote workstation included AP and Base Station. **(For radiated emission below and above 1GHz test)**
- d. The following test modes were pretested for conducted test: **(During the test, the WLAN and Bluetooth function are at working condition and open GPS function)**
 - Mode 1. Play SD Music + H patten + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 2. Play SD Music + Front CCD + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 3. Play SD Music + Back CCD + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 4. Play SD Music + GPS + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 5. Play MP4 + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 6. Play SD MP4 + PC Link + Wi-Fi + Bluetooth + Earphone + LTE

⇒ Cause **"Mode 5"** generated the worst test result; it was reported as final data.
- e. The following test modes were pretested for radiated test: **(During the test, the WLAN and Bluetooth function are at working condition and open GPS function)**
 - Mode 1. Play SD Music + H patten + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 2. Play SD Music + Front CCD + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 3. Play SD Music + Back CCD + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 4. Play SD Music + GPS + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 5. Play MP4 + Wi-Fi + Bluetooth + Earphone + Adapter + LTE
 - Mode 6. Play SD Music + Wi-Fi + Bluetooth + Earphone + LTE (Only Horizontal)
 - Mode 7. Play SD Music + H patten + PC Link + Wi-Fi + Bluetooth + Earphone + LTE

⇒ Cause **"Mode 7"** generated the worst test result; it was reported as final data.
- a. The following test mode was referring to radiated pretest worst case **"Mode 7"** for radiated (1GHz / 5th of harmonic CPU fundamental) final test: **(During the test, the WLAN and Bluetooth function are at working condition)**
 - Mode 7. Play SD Music + H patten + PC Link + Wi-Fi + Bluetooth + Earphone + LTE
- f. Frequency range investigated: Conducted 150 kHz to 30 MHz, Radiated 30 MHz to 13,000 MHz.

2.2 Description of Test System

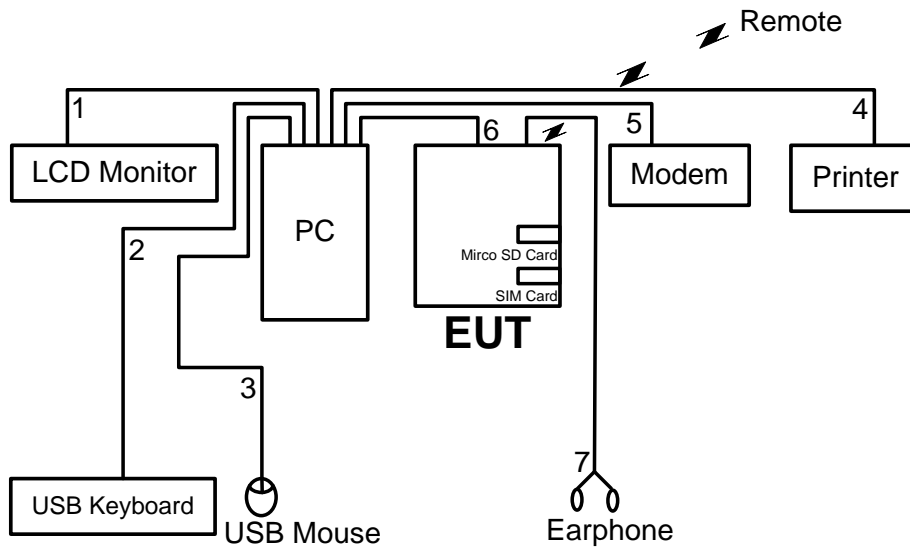
For conduction emission

No.	Description	Manufacturer	Model	FCC ID	Signal Cable Description
For Local					
1	Earphone	APPLE	MB770FE/A	DoC	Audio Cable, Non-Shielded, 1.5m
2	Micro SD Card (Inserted into EUT)	Transcend	8GB	---	---
3	SIM Card (Inserted into EUT)	R&S	---	---	---
For Remote					
-	AP	ASUS	RT-AC66U	D33005/MSQ-RTAC66U	---
-	Base Station	R&S	CMW500	---	---

For radiation emission below and above 1GHz

No.	Description	Manufacturer	Model	FCC ID	Signal Cable Description
For Local					
1	PC	HP	DC7700	DoC	USB Cable, D-Shielded, 0.9m
2	LCD Monitor	DELL	U2410f	DoC	D-Sub Cable, D-Shielded, 1.8m
3	Modem	ACEEX	DM141	IFAXDM1414	RS232 Cable, D-Shielded, 1.0m
4	Printer	EPSON	LQ300+	DoC	D-Shielded, 1.7m
5	USB Keyboard	Microsoft	1366	DoC	USB Cable, AL-F-Shielded, 2.0m
6	USB Mouse	Microsoft	1113	DoC	USB Cable, AL-F-Shielded, 1.8m
7	Earphone	APPLE	MB770FE/A	DoC	Audio Cable, Non-Shielded, 1.5m
8	Micro SD Card (Inserted into EUT)	Transcend	8GB	---	---
9	SIM Card (Inserted into EUT)	R&S	---	---	---
For Remote					
-	AP	ASUS	RT-AC66U	D33005/MSQ-RTAC66U	---
-	Base Station	R&S	CMW500	---	---

2.3 Connection Diagram of Test System for Radiation Emission



The support unit 8 and unit 9 insert into EUT

1. The D-Sub cable is connected from support unit 1 to the support unit 2.
2. The USB cable is connected from support unit 1 to the support unit 5.
3. The USB cable is connected from support unit 1 to the support unit 6.
4. The I/O cable is connected from support unit 1 to the support unit 4.
5. The RS232 cable is connected from support unit 1 to the support unit 3.
6. The USB cable is connected from EUT to the support unit 1.
7. The Audio cable is connected from EUT to the support unit 7.

3. Test Software

< EMI >

Conducted emission

For EUT

During testing, the following program under "Android 4.2.2" was executed:

At the same time, the following programs were executed:

- The EUT plays MP4 music from Micro SD card via Earphone.
- The EUT opens "Wi-Fi" to link with the remote workstation (AP) to receive and transmit data by wireless.
- The EUT opens the "Bluetooth" function
- The EUT opens "LTE" to link with the remote workstation (Base Station) to receive and transmit data by wireless.

Radiated emission**For PC**

Two executive programs, "EMITEST.exe" and "EMCTEST.exe" under Win 7 (PC) which generates a complete line of continuously repeating "H" pattern was used as the test software.

The two programs were executed as follows:

- a. Turn on the power of all equipment.
- b. The PC reads the test program "EMITEST.exe" and "EMCTEST.exe" from the hard disk drive and runs it.
- c. The PC sends "H" messages to the LCD monitor, and the LCD monitor displays "H" patterns on the screen.
- d. The PC sends "H" messages to the printer, and then the printer prints them on the paper.
- e. The PC sends messages to modem.
- f. Repeat the steps from b to e.

At the same time, the following program was executed:

- The PC run "Copy Data" to read and write function from eMMC of EUT.

For EUT

An executive program, "SDC Test Utility-3.1.exe" under "Android 4.2.2", which generates a complete line of continuously repeating "H" pattern was used as the test software.

The EUT connected with PC via USB cable.

At the same time, the following programs were executed:

- The EUT plays MP4 music from Micro SD Card via Earphone.
- The EUT opens "Wi-Fi" to link with the remote workstation (AP) to receive and transmit data by wireless.
- The EUT opens the "Bluetooth" function
- The EUT opens "LTE" to link with the remote workstation (Base Station) to receive and transmit data by wireless.

4. General Information of Test

4.1 Test Facility

For Conducted Emission

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang,
Tao Yuan Hsien, Taiwan, R.O.C.
TEL: 886-3-327-3456
FAX: 886-3-327-0973

Test Site No. : CO01-HY

For Radiated Emission

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang,
Tao Yuan Hsien, Taiwan, R.O.C.
TEL: 886-3-327-3456
FAX: 886-3-327-0973

Test Site No. : 03CH03-HY

4.2 Uncertainty of Test Site

Test Items	Test Site No.	Uncertainty	Remark
Conducted Emissions	CO01-HY	± 2.42 dB	Confidence levels of 95%
Radiated Emissions below 1GHz	03CH03-HY	± 2.54 dB	Confidence levels of 95%
Radiated Emissions above 1GHz	03CH03-HY	± 5.40 dB	Confidence levels of 95%

4.3 Test Voltage

120Vac / 60Hz

4.4 Standard for Methods of Measurement

ANSI C63.4-2009

4.5 Test in Compliance with

CISPR PUB. 22 and FCC Part 15

4.6 Frequency Range Investigated

- Conducted emission test: from 150 kHz to 30 MHz
- Radiated emission test: from 30 MHz to 13,000 MHz

4.7 Test Distance

- The test distance of radiated emission from antenna to EUT is 10 M (from 30 MHz ~ 1 GHz)
- The test distance of radiated emission from antenna to EUT is 3 M (from 1 GHz ~ 7 GHz)
- The test distance of radiated emission from antenna to EUT is 1 M (from 7 GHz ~ 13 GHz)

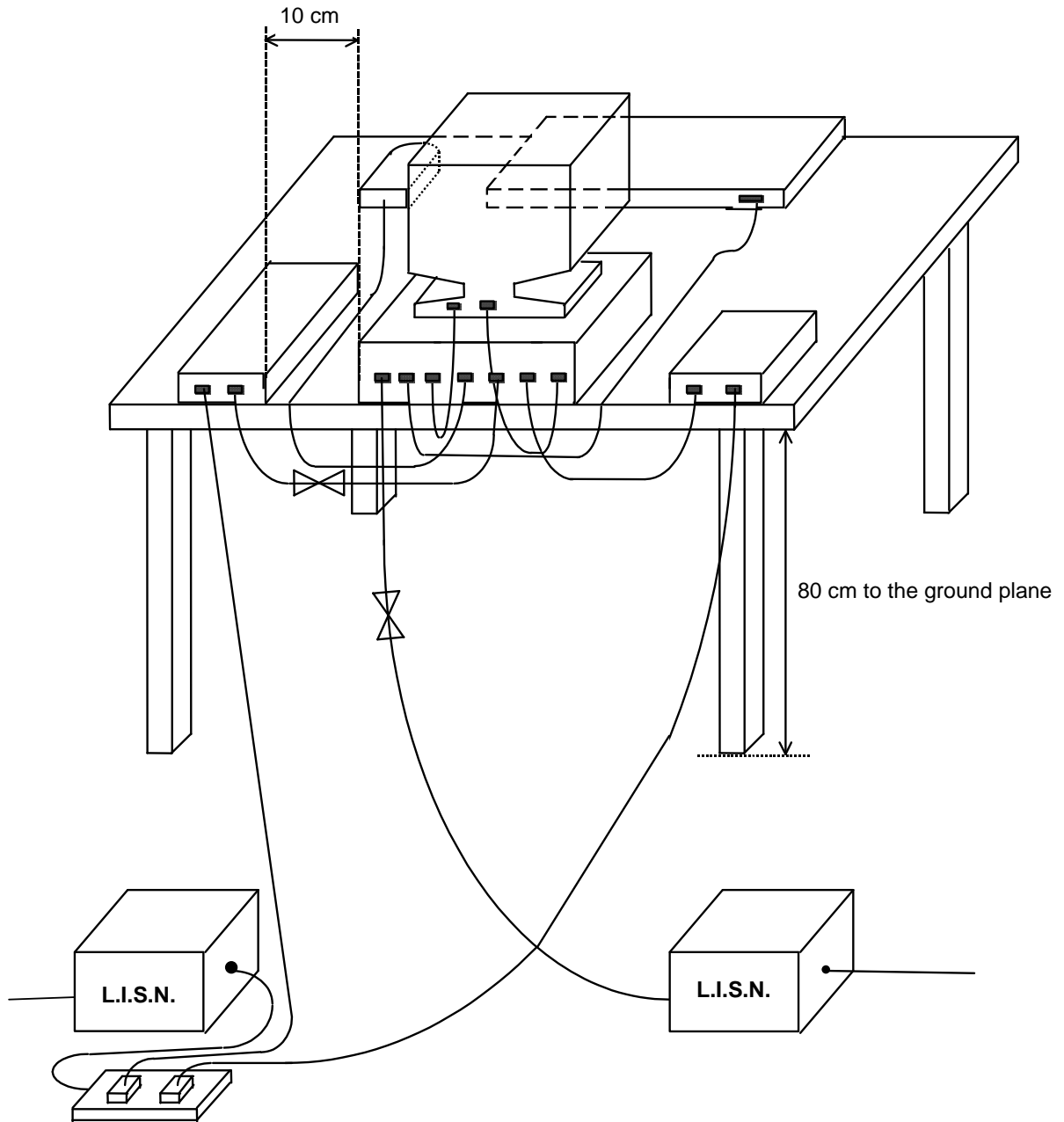
5. Test of Conducted Powerline

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz and return leads of the EUT according to the methods defined in ANSI C63.4, Clause 7. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 5.3. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position producing maximum conducted emissions.

5.1 Test Procedures

- a. The EUT was warmed up for 15 minutes before testing started.
- b. The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meters from any other grounded conducting surface.
- c. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- d. All the support units are connected to the other LISN.
- e. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- f. The CISPR states that a 50 ohm, 50 microhenry LISN should be used.
- g. Both sides of AC line were checked for maximum conducted interference.
- h. The frequency range from 150 kHz to 30 MHz was searched.
- i. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.2 Typical Test Setup Layout of Conducted Powerline

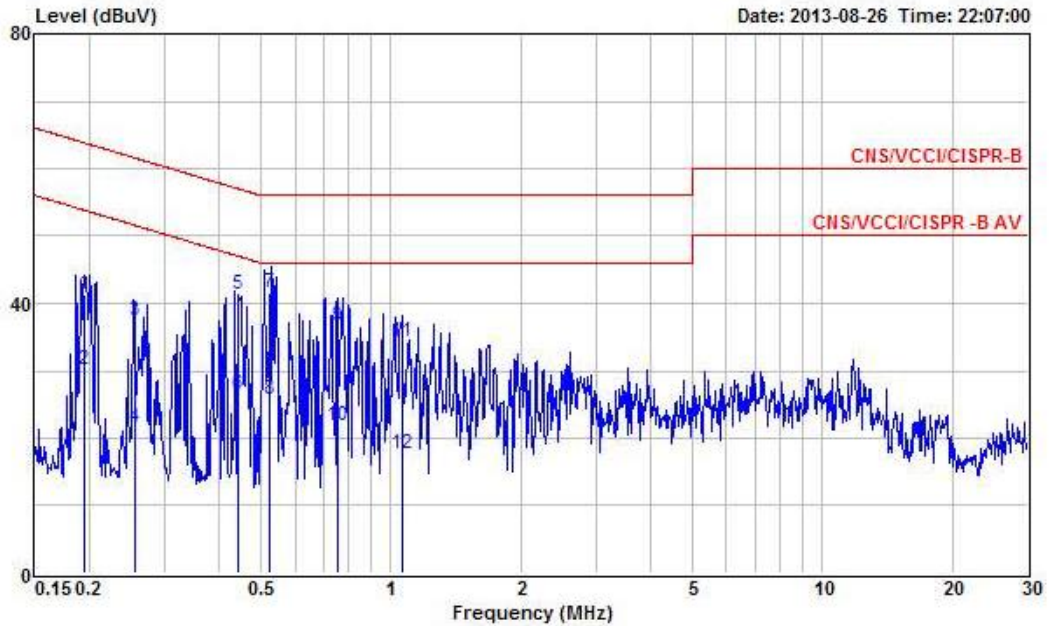


5.3 Test Result of AC Powerline Conducted Emission

Test Mode	Mode 5	Temperature	24°C
Test Engineer	Sam Chang	Humidity	57%

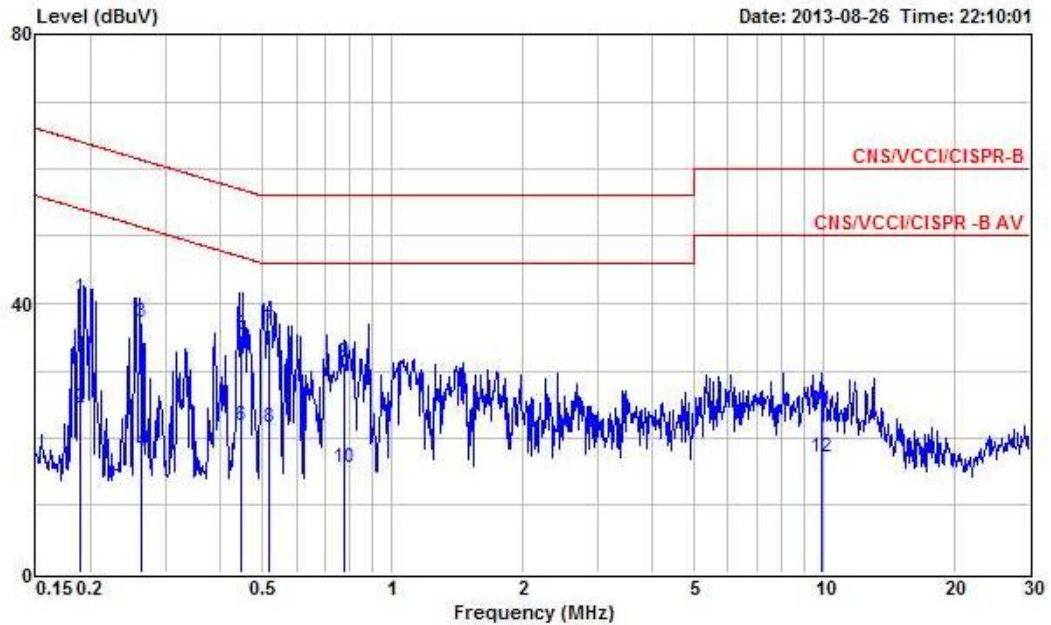
Note: Corrected Reading (dBµV) = LISN Factor + Cable Loss + Read Level = Level

■The test was passed at the minimum margin that marked by the frame in the following data



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B LISN 2001/004-121228 LINE
 Power : 120V/60Hz
 Model : MV7A
 Memo : MODE 5

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.195	41.40	-22.40	63.80	41.16	0.14	0.10	QP
2	0.195	30.09	-23.71	53.80	29.85	0.14	0.10	Average
3	0.256	37.35	-24.22	61.57	37.11	0.14	0.10	QP
4	0.256	21.67	-29.90	51.57	21.43	0.14	0.10	Average
5	0.444	41.21	-15.78	56.99	40.96	0.15	0.10	QP
6	0.444	26.58	-20.41	46.99	26.33	0.15	0.10	Average
7	0.523	41.55	-14.45	56.00	41.29	0.16	0.10	QP
8	0.523	25.66	-20.34	46.00	25.40	0.16	0.10	Average
9	0.751	36.51	-19.49	56.00	36.25	0.16	0.10	QP
10	0.751	21.85	-24.15	46.00	21.59	0.16	0.10	Average
11	1.060	34.20	-21.80	56.00	33.93	0.17	0.10	QP
12	1.060	17.76	-28.24	46.00	17.49	0.17	0.10	Average



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B LISN 2001/004-121228 NEUTRAL
 Power : 120V/60Hz
 Model : MY7A
 Memo : MODE 5

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.189	40.65	-23.43	64.08	40.45	0.10	0.10	QP
2	0.189	24.47	-29.61	54.08	24.27	0.10	0.10	Average
3	0.262	37.03	-24.34	61.37	36.82	0.11	0.10	QP
4	0.262	17.98	-33.39	51.37	17.77	0.11	0.10	Average
5	0.445	35.43	-21.54	56.97	35.21	0.12	0.10	QP
6	0.445	21.69	-25.28	46.97	21.47	0.12	0.10	Average
7	0.518	36.23	-19.77	56.00	36.00	0.13	0.10	QP
8	0.518	21.65	-24.35	46.00	21.42	0.13	0.10	Average
9	0.775	31.07	-24.93	56.00	30.84	0.13	0.10	QP
10	0.775	15.57	-30.43	46.00	15.34	0.13	0.10	Average
11	9.860	24.19	-35.81	60.00	23.78	0.31	0.10	QP
12	9.860	17.24	-32.76	50.00	16.83	0.31	0.10	Average

6. Test of Radiated Emission

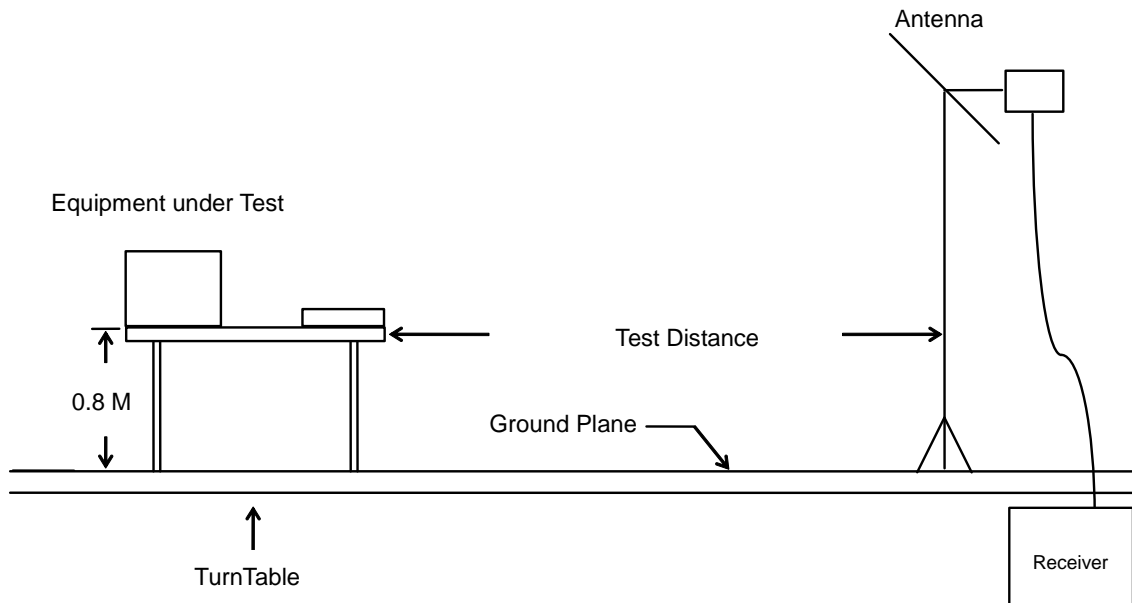
Radiated emissions below 1 GHz were measured with a bandwidth of 120 kHz for 30 MHz to 1,000 MHz and bandwidth of 1 MHz for above 1 GHz to 5th harmonic of highest frequency according to the methods defines in ANSI C63.4, Clause 8. The EUT was placed on a nonmetallic stand, 0.8 meter above the ground plane, as shown in section 6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

6.1 Test Procedures

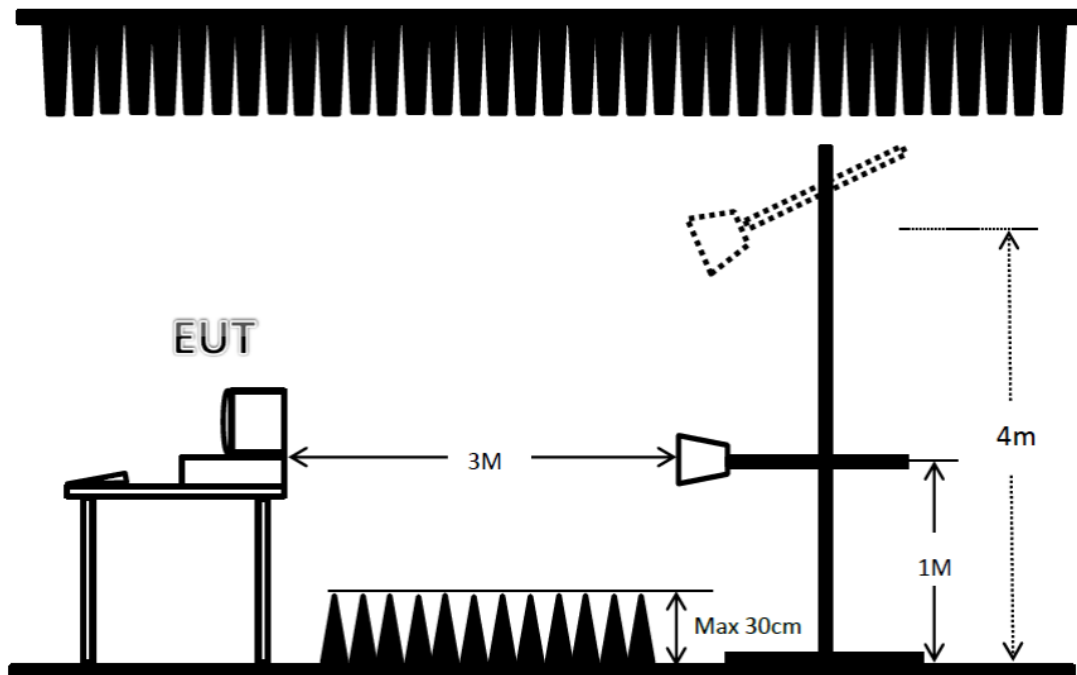
- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 10/3/1 meters from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

6.2 Typical Test Setup Layout of Radiated Emission

< Below 1GHz >



< Above 1GHz >



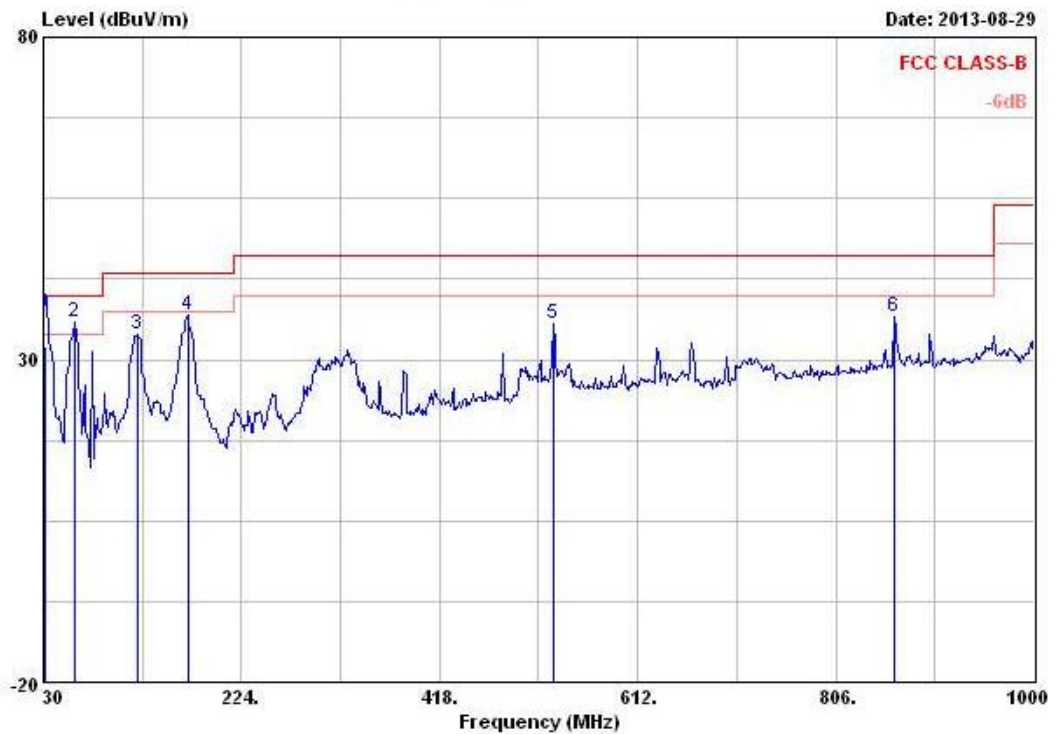
6.3 Test Result of Radiated Emission (Below 1GHz)

Frequency Range of Test	From 30 MHz to 1,000 MHz	Test Distance	3m
Test Mode	Mode 7	Temperature	26°C
Test Engineer	Alan Chen	Humidity	50%

Note: 1. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)

2. Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level

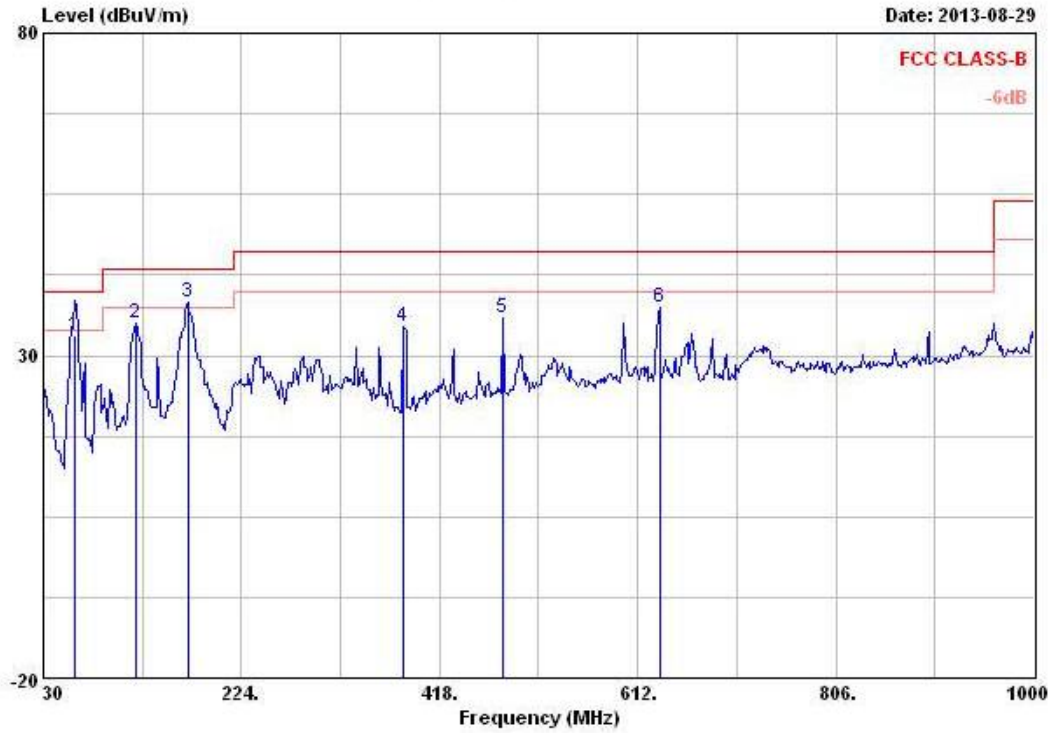
■The test was passed at the minimum margin that marked by the frame in the following data



Site : 03CH03-HY
Condition : FCC CLASS-B 3m AT-22237 VERTICAL

Power : 120V/60Hz
Model : MV7A
Memo : MODE 7

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	31.940	32.02	-7.98	40.00	41.13	17.70	0.80	27.61	QP	100	150
2	60.070	35.74	-4.26	40.00	55.58	6.58	1.12	27.54	Peak	---	---
3	122.150	33.80	-9.70	43.50	46.82	12.64	1.64	27.30	Peak	---	---
4	171.620	36.94	-6.56	43.50	52.56	9.59	1.90	27.11	Peak	---	---
5	529.550	35.50	-10.50	46.00	42.15	17.81	3.45	27.91	Peak	---	---
6	863.230	36.69	-9.31	46.00	39.60	20.25	4.48	27.64	Peak	---	---



Site : 03CH03-HY
 Condition : FCC CLASS-B 3m AT-22237 HORIZONTAL

Power : 120V/60Hz
 Model : MV7A
 Memo : MODE 7

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Loss	Factor		Pos	Pos
					dBuV	dB/m	dB	dB		cm	deg
1	60.070	33.20	-6.80	40.00	53.04	6.58	1.12	27.54	QP	200	256
2	121.180	35.03	-8.47	43.50	48.02	12.67	1.64	27.30	Peak	---	---
3	171.620	38.39	-5.11	43.50	54.01	9.59	1.90	27.11	Peak	---	---
4	382.110	34.60	-11.40	46.00	43.94	14.97	2.90	27.21	Peak	---	---
5	479.110	35.79	-10.21	46.00	43.04	17.24	3.27	27.76	Peak	---	---
6	633.340	37.34	-8.66	46.00	42.54	18.96	3.81	27.97	Peak	---	---

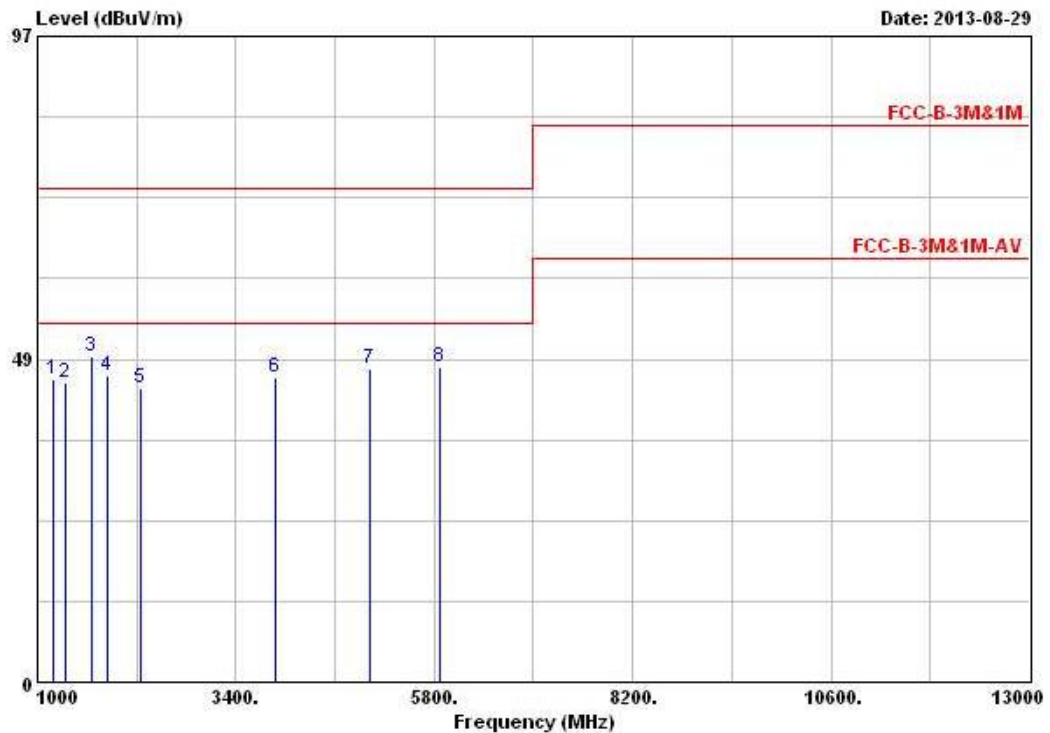
6.4 Test Result of Radiated Emission (Above 1GHz)

Frequency Range of Test	From 1,000 MHz to 13,000 MHz	Test Distance	3m/1m
Test Mode	Mode 7	Temperature	26°C
Test Engineer	Alan Chen	Humidity	50%

Note: 1. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)

2. Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level

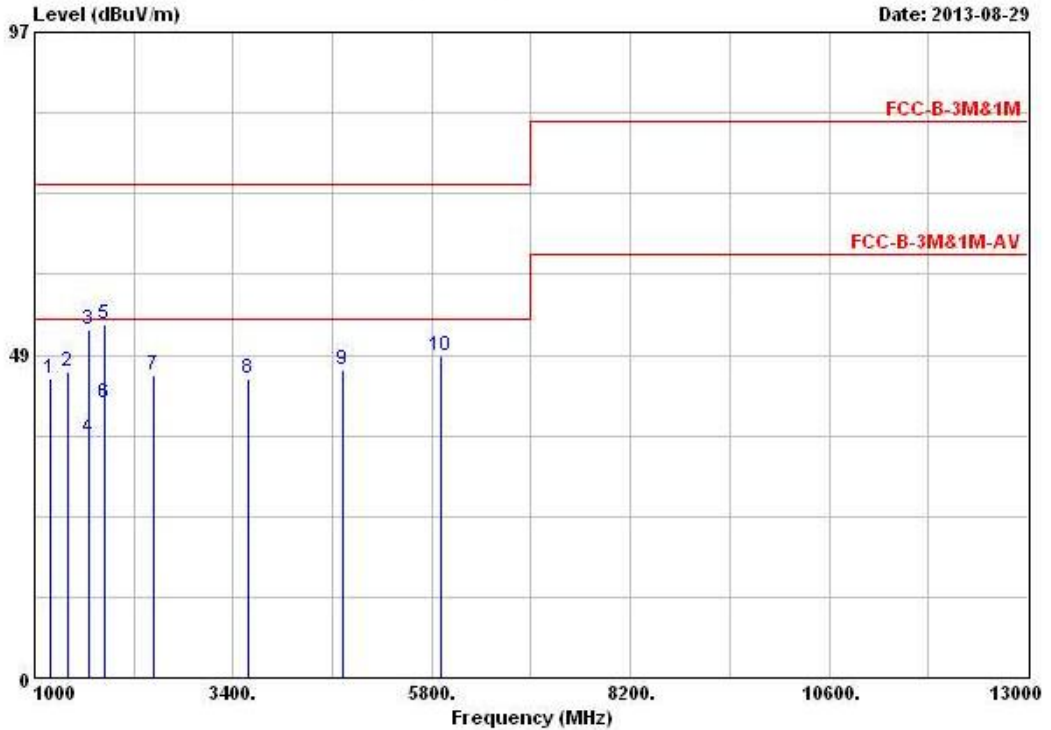
■ The test was passed at the minimum margin that marked by the frame in the following data



Site : 03CH03-HY
 Condition : FCC-B-3M&1M 1m HORN 6741-2013 07 VERTICAL

Power : 120V/60Hz
 Model : MV7A
 Memo : MODE 7

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	1195.000	45.53	-28.47	74.00	52.11	24.99	1.92	33.49	Peak	---	---
2	1330.000	45.07	-28.93	74.00	50.94	25.35	1.99	33.21	Peak	---	---
3	1655.000	48.80	-25.20	74.00	52.75	26.57	2.18	32.70	Peak	---	---
4	1855.000	45.98	-28.02	74.00	48.83	27.41	2.29	32.55	Peak	---	---
5	2255.000	44.06	-29.94	74.00	45.57	28.46	2.53	32.50	Peak	---	---
6	3875.000	45.77	-28.23	74.00	42.08	32.99	3.18	32.48	Peak	---	---
7	5030.000	47.15	-26.85	74.00	41.56	33.96	4.03	32.40	Peak	---	---
8	5870.000	47.25	-26.75	74.00	40.62	34.94	4.11	32.42	Peak	---	---



Site : 03CH03-HY
 Condition : FCC-B-3M&1M 1m HORN 6741-2013 07 HORIZONTAL

Power : 120V/60Hz
 Model : MV7A
 Memo : MODE 7

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark	Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor		Pos	Pos
			dB	dBuV/m	dBuV	dB	dB		cm	deg
1	1195.000	45.02	-28.98	74.00	51.60	24.99	1.92	33.49 Peak	---	---
2	1395.000	46.09	-27.91	74.00	51.62	25.53	2.03	33.09 Peak	---	---
3	1655.000	52.19	-21.81	74.00	56.14	26.57	2.18	32.70 Peak	104	329
4	1655.000	36.06	-17.94	54.00	40.01	26.57	2.18	32.70 Average	104	329
5	1855.000	53.09	-20.91	74.00	55.94	27.41	2.29	32.55 Peak	100	226
6	1855.000	41.15	-12.85	54.00	44.00	27.41	2.29	32.55 Average	100	226
7	2430.000	45.37	-28.63	74.00	46.55	28.70	2.66	32.54 Peak	---	---
8	3575.000	44.89	-29.11	74.00	42.04	32.18	3.20	32.53 Peak	---	---
9	4735.000	46.29	-27.71	74.00	41.39	33.49	3.86	32.45 Peak	---	---
10	5910.000	48.26	-25.74	74.00	41.63	34.97	4.09	32.43 Peak	---	---

7. List of Measuring Equipment Used

< Conducted Emission >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9kHz ~ 2.75GHz	Nov. 14, 2012	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz ~ 30MHz	Dec. 28, 2012	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 ~ 60Hz	N/A	Conduction (CO01-HY)
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832010001	9kHz ~ 30MHz	Mar. 01, 2013	Conduction (CO01-HY)

※ Note: Calibration Interval of instruments listed above is one year.

< Radiated Emission below 1GHz >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Dec. 01, 2012	Radiation (03CH03-HY)
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May. 03, 2013	Radiation (03CH03-HY)
Receiver	R&S	ESU26	1302.6005.26	20Hz ~ 26.5GHz	Apr. 02, 2013	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 22, 2012	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	9MHz ~ 1GHz	Jan. 17, 2013	Radiation (03CH03-HY)
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)

※ Note: Calibration Interval of instruments listed above is one year.

< Radiated Emission above 1GHz >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	Agilent	8449B	3008A02364	1GHz ~ 26.5GHz	May 06, 2013	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 31, 2013	Radiation (03CH03-HY)
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Jan. 17, 2013	Radiation (03CH03-HY)
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)
Receiver	R&S	ESU26	1302.6005.26	20Hz ~ 26.5GHz	Apr. 02, 2013	Radiation (03CH03-HY)

※ Note: Calibration Interval of instruments listed above is one year.

8. Modification of EUT

Please refer to the technical documents.