

FCC TEST REPORT

for

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

Equipment : HDSDI BOARD

Model No. : L007KK

Trade Name : NEC

FCC ID : N/A

Filing Type : Verification

Applicant : **NPG Display Ltd. Taiwan Branch**
Fl. 2, No. 8, Tun Hwa N. Rd., Sungshan District,
105 Taipei, Taiwan, R.O.C.

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SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of this test report

Original Report Issue Date: Nov. 28, 2007

☒ No additional attachment.

☐ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE

for

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

Equipment : HDSDI BOARD

Model No. : L007KK

Trade Name : NEC

FCC ID : N/A

Applicant : **NPG Display Ltd. Taiwan Branch**
Fl. 2, No. 8, Tun Hwa N. Rd., Sungshan District,
105 Taipei, Taiwan, R.O.C.

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 - 2003** and the energy emitted by this equipment was **passed FCC Part 15 Subpart B** in both radiated and conducted emission **Class A** limits.

Testing was carried out on Nov. 21, 2007 at **SPORTON International Inc.** LAB.


Castries Huang
Supervisor

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1 Applicant

NPG Display Ltd. Taiwan Branch
Fl. 2, No. 8, Tun Hwa N. Rd., Sungshan District,
105 Taipei, Taiwan, R.O.C.

1.2 Manufacturer

Same as 1.1.

1.3 Basic Description of Equipment under Test

Equipment	: HDSDI BOARD
Model No.	: L007KK
Trade Name	: NEC
BNC Cablex12	: Shielded, 1.8m
BNC Cablex	: Shielded, 10m
HDMI Cable	: Shielded, 1.5m
FiberCable	: Non-Shielded, 1.2m
RJ45 Cable	: Shielded, 1.5m
DVI Cable	: Shielded, 2.0m
D-SUB Cable	: Shielded, 2.0m
Audio Cable	: Non-Shielded, 1.8m
DVI to D-SUB Cable	: Shielded, 0.15m
RS232 Cable	: Shielded, 1.2m
AV Cable	: Shielded, 1.5m
YPbPr Cable	: Shielded, 1.5m
S-Video Cable	: Shielded, 1.5m
Power Supply Type	: Switching
AC Power Cord	: Non-Shielded, 3.0m, 3pin

1.4 Feature of Equipment under Test

- Please refer to user manual.

2. Test Configuration of Equipment under Test

2.1 Test Manner

- a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 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, HP PC, BTC PS/2 Keyboard, MICROSOFT PS/2 Mouse, EPSON Printer, ACEEX Modem, SONY DVD Player, GALAXY Headset and EUT for EMI test. The remote workstation included Corio2 Powered Video Processor.
- c. The following modes were pretested :
 - Mode 1. DVI, 1920*1080 60Hz
 - Mode 2. D-SUB, 1920*1080 60Hz
 - Mode 3. HDSOI, 1920*1080 60Hz
 - Mode 4. DVI, 1600*1200 60Hz
 - Mode 5. D-SUB, 1600*1200 60Hz
 - Mode 6. AV
 - Mode 7. S-Video
 - Mode 8. HDMI
 - Mode 9. Y, Pb/Pr

For conduction, cause "mode 8" generated the worst test result, it was reported as final data.

For radiation, cause "mode 3" generated the worst test result, it was reported as final data.
- d. Frequency range investigated: Conduction 150 kHz to 30 MHz, Radiation 30 MHz to 2000MHz.

2.2 Description of Test System

Support Unit 1. -- Personal Computer (HP) -- for local workstation

FCC ID	: N/A
Model No.	: SGH6500FPX
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0018
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 2. -- PS/2 Keyboard (BTC) – for local workstation

FCC ID : N/A
Model No. : 9110
Serial No. : SP0024
Data Cable : Shielded, 1.7m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 3. -- PS/2 Mouse (MICROSOFT) – for local workstation

FCC ID : N/A
Model No. : 1004
Serial No. : SP0037
Data Cable : Shielded, 1.8m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 4. -- Printer (EPSON) – for local workstation

FCC ID : N/A
Model No. : LQ300+
Power Supply Type : Linear
Power Cord : Non-Shielded
Serial No. : SP0048
Data Cable : Shielded, 360 degree via metal backshells, 1.8m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 5. -- Modem (ACEEX) – for local workstation

FCC ID : IFAXDM1414
Model No. : DM1414
Power Supply Type : Linear
Power Cord : Non-Shielded
Serial No. : SP0055
Data Cable : Shielded, 360 degree via metal backshells, 1.2m

Support Unit 6. -- DVD Player (SONY) – for local workstation

FCC ID : N/A
Model No. : DVP-N590V
Serial No. : SP0067
Data Cable : Non-Shielded, 2.0m

Support Unit 7. -- DVD Player (SONY) – for local workstation

FCC ID	: N/A
Model No.	: DVP-NS509
Serial No.	: SP0067
Data Cable	: Non-Shielded, 2.0m

Support Unit 8. -- Headset (GALAXY) – for local workstation

FCC ID	: N/A
Model No.	: HP-316
Serial No.	: SP0067
Data Cable	: Non-Shielded, 1.8m

Support Unit 9. – Video Processor (Corio2 Powered) – for remote workstation

FCC ID	: N/A
Model No.	: C2-7200
Serial No.	: SP0067
Data Cable	: Shielded, 1.7m

3. Test Software

An executive program, EMCTEST.EXE under WIN XP, which generates a complete line of continuously repeating " H " pattern was used as the test software.

The program was executed as follows :

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

At the same time, " Media player " was executed to play audio.

4. General Information of Test

4.1 Test Facility

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiag, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No. : CO01-HY, 10CH01-HY, 03CH04-HY

4.2 Test Voltage

120V / 60Hz

4.3 Standard for Methods of Measurement

ANSI C63.4-2003

4.4 Test in Compliance with

FCC Rules and Regulations Part 15 Subpart B

4.5 Frequency Range Investigated

- a. Conduction: from 150 kHz to 30 MHz
- b. Radiation: from 30 MHz to 2000 MHz

4.6 Test Distance

- a. The test distance of radiated emission from antenna to EUT is 10 M. (from 30MHz ~ 1000MHz)
- b. The test distance of radiated emission from antenna to EUT is 3 M (from 1GHz ~ 2GHz)

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 C63.4-2003 Section 3.1. 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 produced maximum conducted emissions.

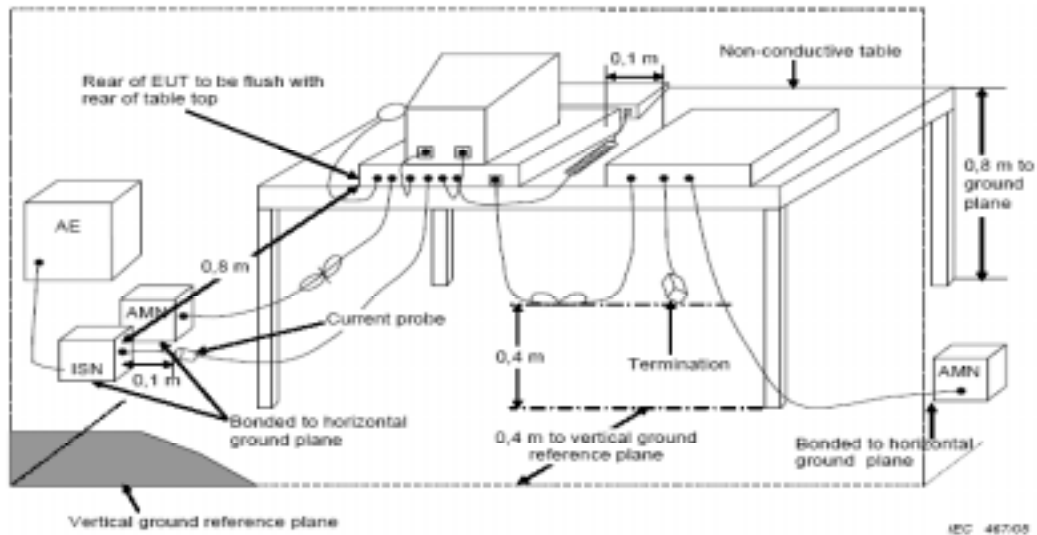
5.1 Description of Major Test Instruments

● Test Receiver	(R&S ESCS 30)
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

5.2 Test Procedures

- a. 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.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connect to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The CISPR states that a 50 ohm, 50 microhenry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.3 Typical Test Setup Layout of Conducted Powerline

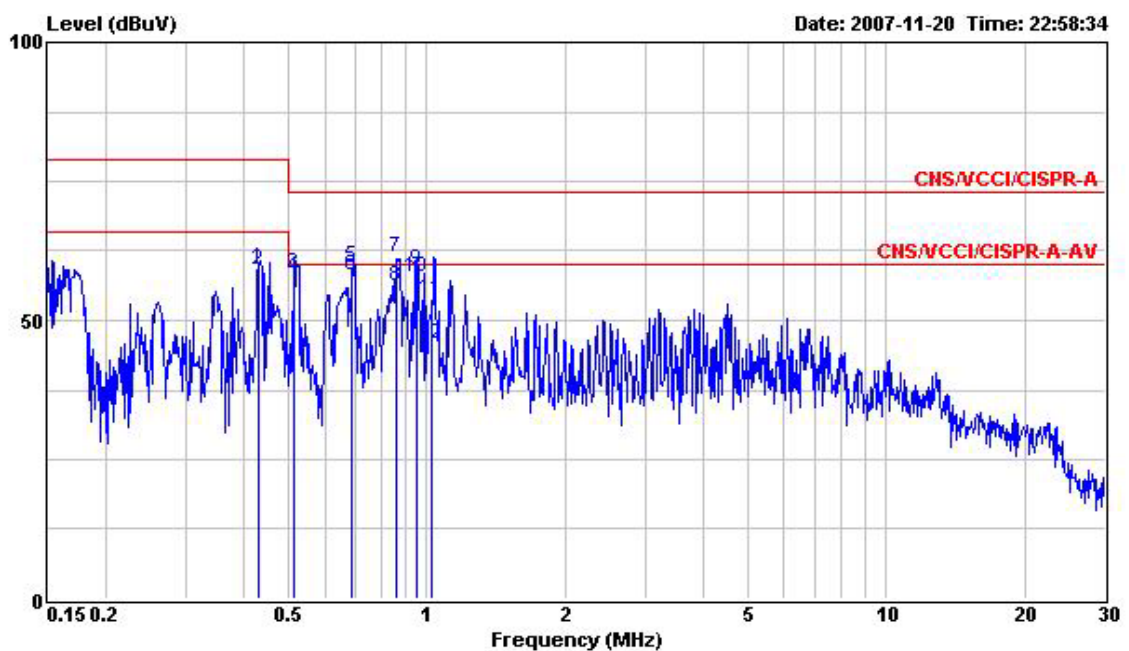


5.4 Test Result of AC Powerline Conducted Emission

5.4.1 Test Mode: Mode 8

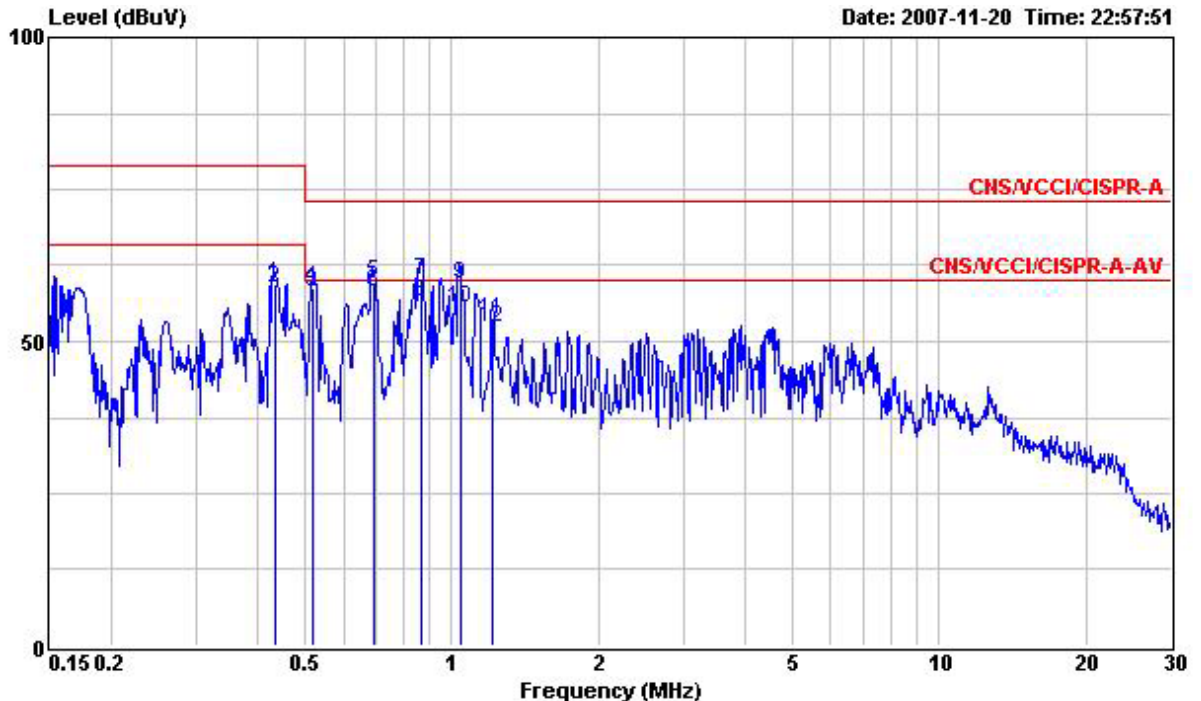
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 22
- Relative Humidity: 52 %
- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- All emissions not reported here are more than 10 dB below the prescribed limit.

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



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-A 2001/004 200604 LINE
 EUT : LCD Monitor(HDSOI)
 Power : 120V/60Hz
 Model : L657TA
 Memo : HDMI
 Memo :
 Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.431	59.47	-19.53	79.00	59.25	0.10	0.12	QP
2	0.431	59.10	-6.90	66.00	58.88	0.10	0.12	Average
3	0.516	58.57	-14.43	73.00	58.34	0.10	0.13	QP
4	0.516	57.81	-2.19	60.00	57.58	0.10	0.13	Average
5	0.689	59.90	-13.10	73.00	59.65	0.10	0.15	QP
6	0.689	57.99	-2.01	60.00	57.74	0.10	0.15	Average
7	0.860	61.42	-11.58	73.00	61.16	0.10	0.16	QP
8	0.860	56.16	-3.84	60.00	55.90	0.10	0.16	Average
9	0.949	58.95	-14.05	73.00	58.68	0.10	0.17	QP
10	0.949	57.74	-2.26	60.00	57.47	0.10	0.17	Average
11	1.026	53.81	-19.19	73.00	53.54	0.10	0.17	QP
12	1.026	45.94	-14.06	60.00	45.67	0.10	0.17	Average



Site : CO01-HV
 Condition : CNS/VCCI/CISPR-A 2001/004 200604 NEUTRAL
 EUT : LCD Monitor(HDSOI)
 Power : 120V/60Hz
 Model : L657TA
 Memo : HDMI
 Memo :
 Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.433	59.27	-19.73	79.00	59.05	0.10	0.12	QP
2	0.433	58.80	-7.20	66.00	58.58	0.10	0.12	Average
3	0.518	57.97	-2.03	60.00	57.74	0.10	0.13	Average
4	0.518	58.67	-14.33	73.00	58.44	0.10	0.13	QP
5	0.692	59.70	-13.30	73.00	59.45	0.10	0.15	QP
6	0.692	57.96	-2.04	60.00	57.71	0.10	0.15	Average
7	0.867	60.21	-12.79	73.00	59.95	0.10	0.16	QP
8	0.867	56.65	-3.35	60.00	56.39	0.10	0.16	Average
9	1.040	59.37	-13.63	73.00	59.10	0.10	0.17	QP
10	1.040	55.66	-4.34	60.00	55.39	0.10	0.17	Average
11	1.215	53.65	-19.35	73.00	53.39	0.10	0.16	QP
12	1.215	52.27	-7.73	60.00	52.01	0.10	0.16	Average

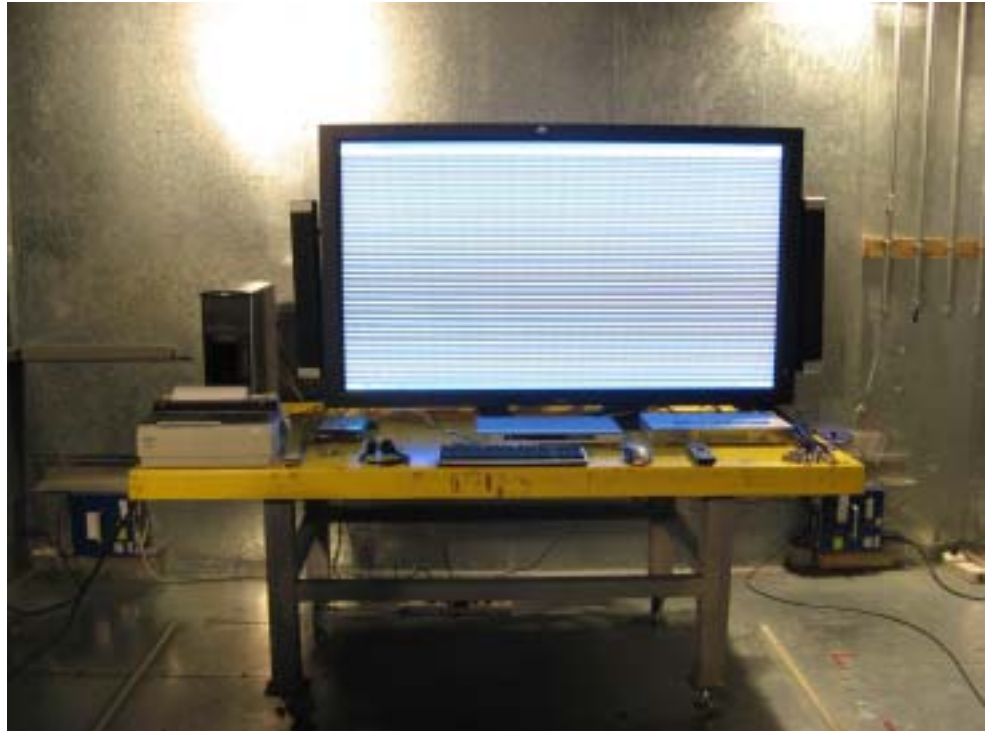
Test Engineer :

Tom Lee

5.5 Photographs of Conducted Powerline Test Configuration

- The photographs show the configuration that generates the maximum emission.

FRONT VIEW



REAR VIEW



SIDE VIEW



6. Test of Radiated Emission

Radiated emissions from 30 MHz to 2,000 MHz were measured with a bandwidth of 120 kHz for 30 MHz to 1000 MHz and 1 MHz for above 1GHz according to the methods defines in ANSI C63.4-2003. 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 Major Measuring Instruments

6.1.1 For 30MHz to 1GHz

- Amplifier (HP 87405A)
 - RF Gain 29 dB
 - Signal Input 10 MHz - 3 GHz

- Spectrum Analyzer (R&S FSP)
 - Attenuation 10 dB
 - Start Frequency 30 MHz
 - Stop Frequency 1000 MHz
 - Resolution Bandwidth 120 kHz
 - Signal Input 9 kHz – 30 GHz

- Test Receiver (R&S ESCS30)
 - Resolution Bandwidth 120 kHz
 - Frequency Band 9 kHz - 2.75 GHz
 - Quasi-Peak Detector ON for Quasi-Peak Mode
OFF for Peak Mode

6.1.2 For 1GHz to 2GHz

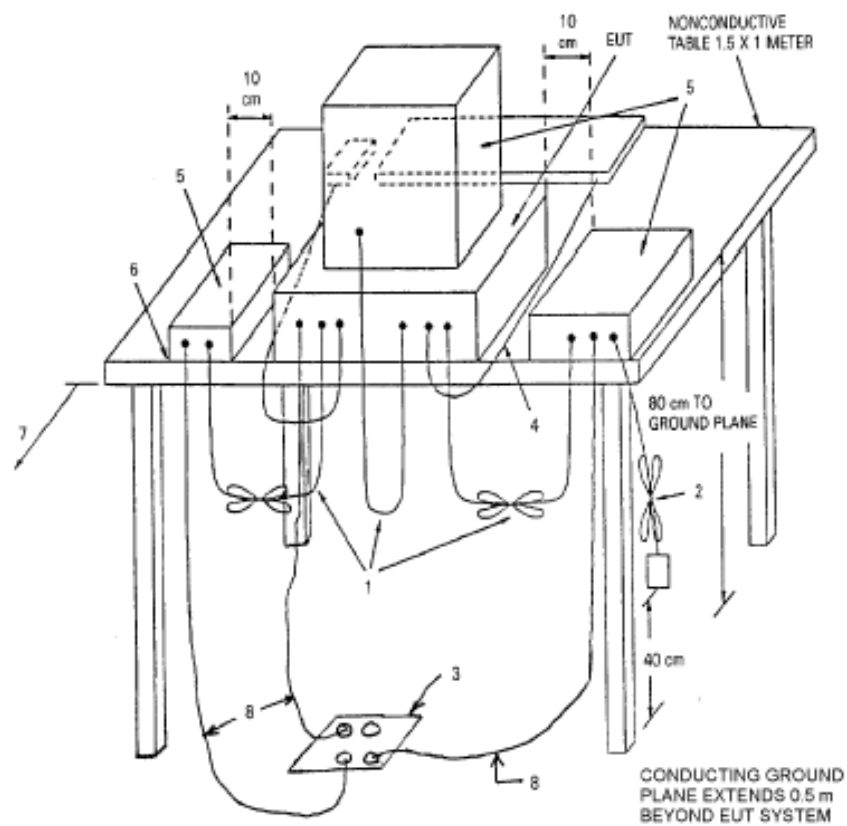
- Amplifier (MITEQ NSP2650-NF)
 - RF Gain 40 dB
 - Signal Input 100 MHz -26.5 GHz

- Spectrum Analyzer (R&S FSP40)
 - Attenuation 10 dB
 - Start Frequency 1 GHz
 - Stop Frequency 2 GHz
 - Resolution Bandwidth 1 MHz
 - Video Bandwidth 1 MHz
 - Signal Input 9 KHz to 40 GHz

6.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3/10 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.

6.3 Typical Test Setup Layout of Radiated Emission



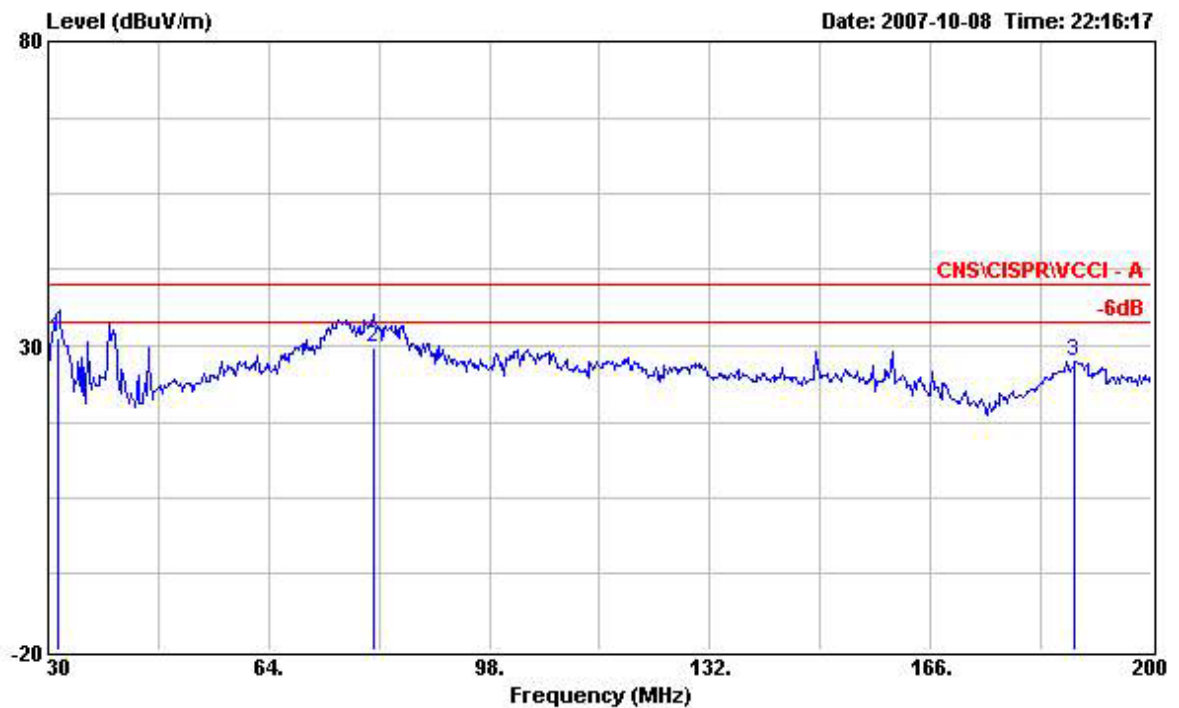
6.4 Test Result of Radiated Emission

6.4.1 Test Mode: Mode 3

- Frequency Range of Test: from 30 MHz to 11,000 MHz
- Temperature : 23
- Relative Humidity : 64 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

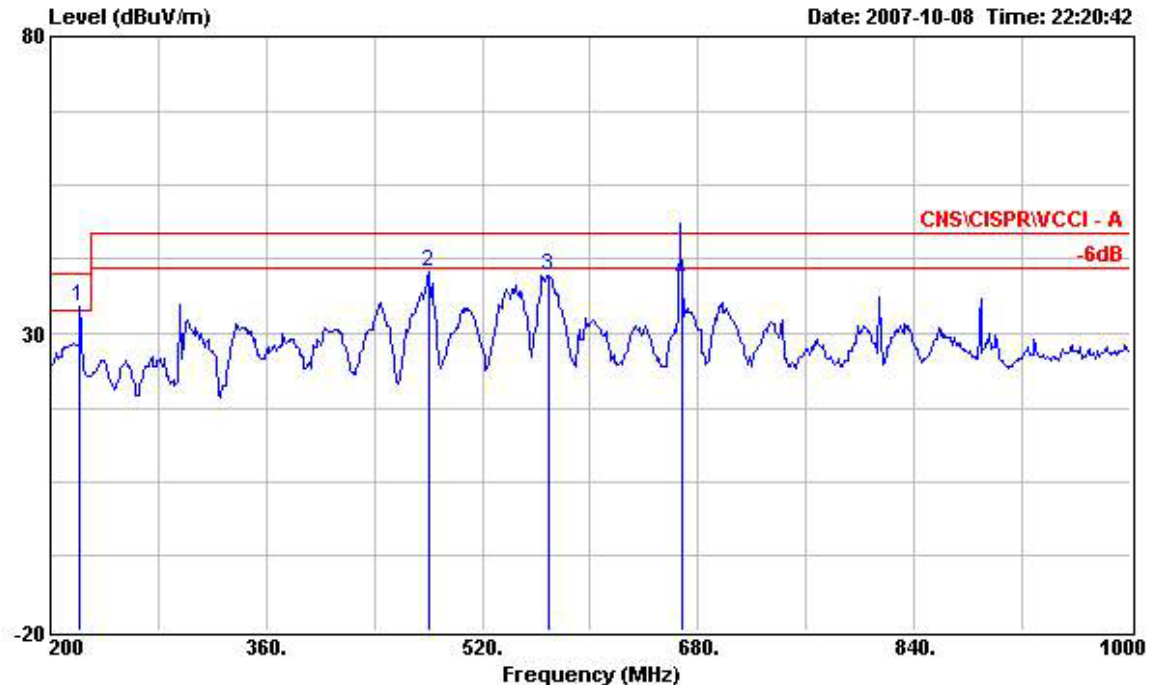
■ The test was passed at the minimum margin that marked by the frame in the following test record

- Test Distance: 10M for 30MHz ~ 1GHz



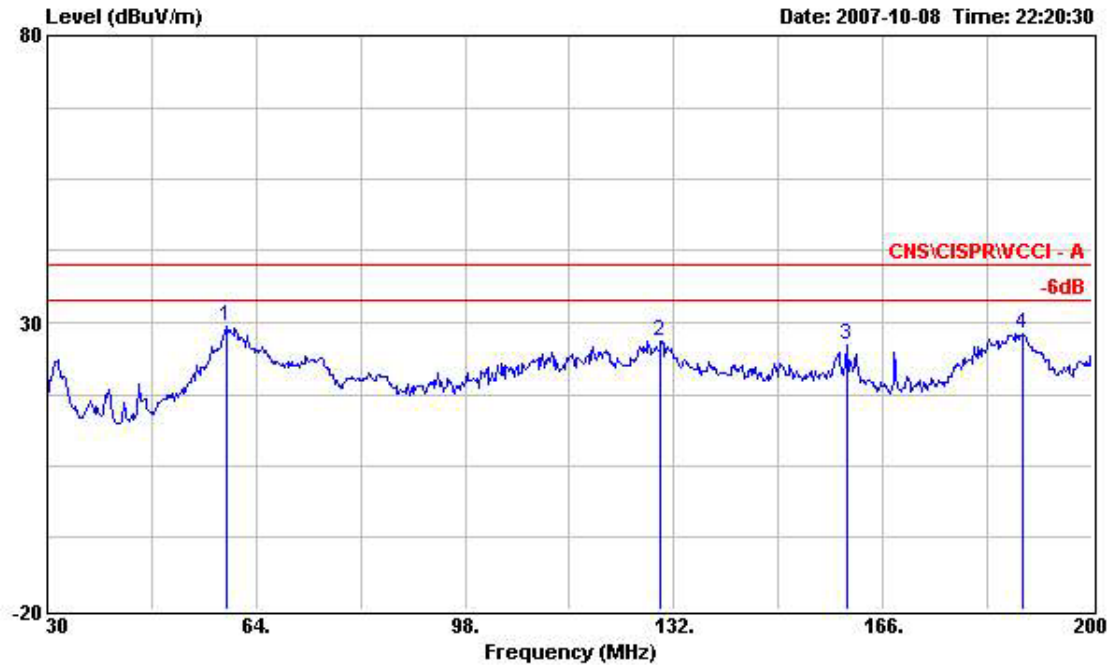
Site : 10CH01
 Condition : CNS\CISPR\VCCI - A 10m BICONICAL-950814 VERTICAL
 EUT :
 Power :
 model :
 Memo : HDSDI 1920*1080 60Hz
 Memo :
 Memo :

	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	31.640	31.42	-8.58	40.00	45.40	13.27	1.20	28.45	QP		
2	80.220	29.82	-10.18	40.00	47.50	8.73	1.93	28.34	QP		
3	188.270	27.32	-12.68	40.00	38.28	14.09	2.81	27.86	Peak	---	---



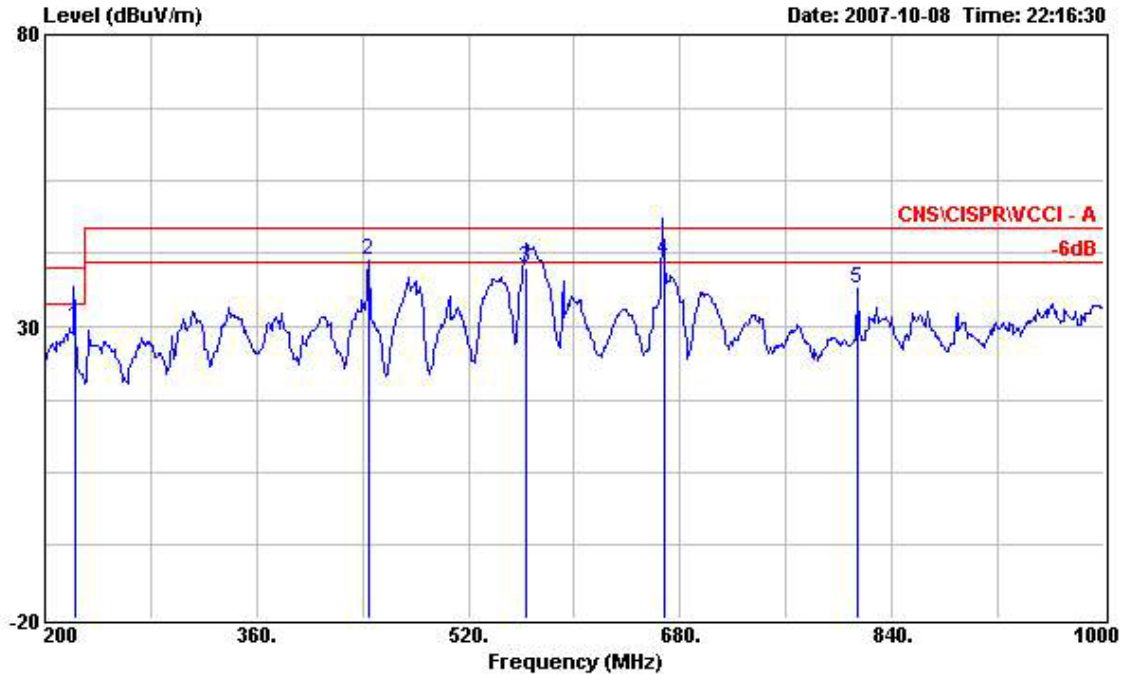
Site : 10CH01
 Condition : CNS/CISPR/VCCI - A 10m LOG-950814 VERTICAL
 EUT :
 Power :
 model :
 Memo : HDSDI 1920*1080 60Hz
 Memo :
 Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	221.600	34.42	-5.58	40.00	44.32	15.05	2.41	27.36	Peak	---	---
2	480.000	40.39	-6.61	47.00	48.00	17.33	3.47	28.41	Peak	---	---
3	569.600	39.90	-7.10	47.00	45.79	18.77	3.80	28.46	Peak	---	---
4	667.540	38.75	-8.25	47.00	43.01	19.87	4.13	28.26	QP	---	---



Site : 10CH01
 Condition : CNS\CISPR\VCCI - A 10m BICONICAL-950814 HORIZONTAL
 EUT :
 Power :
 model :
 Memo : HDSDI 1920*1080 60Hz
 Memo :
 Memo :

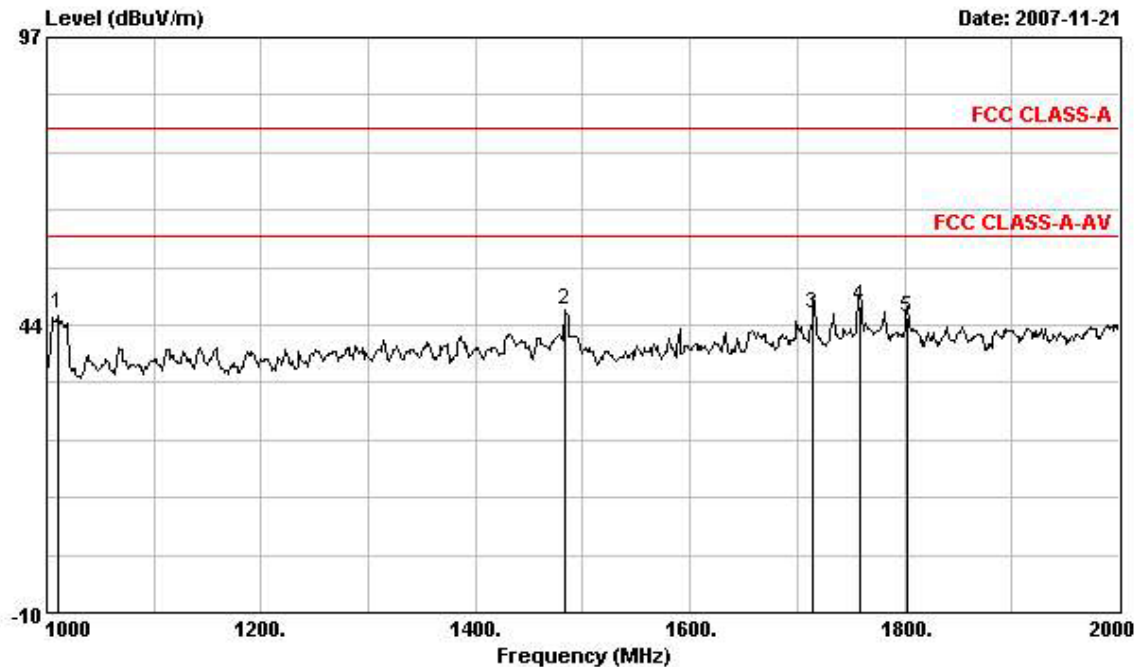
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	59.070	29.39	-10.61	40.00	46.66	9.44	1.67	28.38	Peak	---	---
2	129.790	26.75	-13.25	40.00	40.50	11.92	2.48	28.15	Peak	---	---
3	160.220	25.96	-14.04	40.00	39.11	12.19	2.66	28.00	Peak	---	---
4	188.780	28.07	-11.93	40.00	39.01	14.11	2.81	27.86	Peak	---	---



Site : 10CH01
 Condition : CNS\CISPR\VCCI - A 10m LOG-950814 HORIZONTAL
 EUT :
 Power :
 model :
 Memo : HDSDI 1920*1080 60Hz
 Memo :
 Memo :

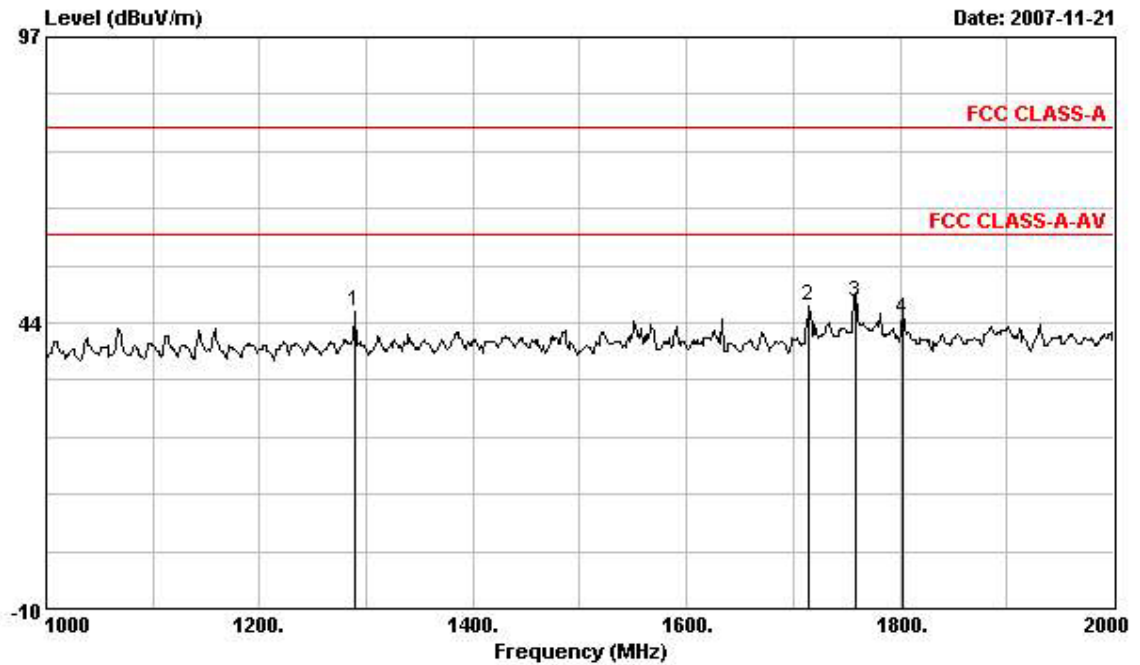
	Freq	Level	Over	Limit	Read	Probe	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	222.530	30.05	-9.95	40.00	40.01	14.99	2.41	27.36	QP		
2 !	444.800	41.29	-5.71	47.00	49.35	16.61	3.43	28.10	Peak		
3	563.960	39.98	-7.02	47.00	46.00	18.68	3.77	28.47	QP		
4 !	667.510	41.42	-5.58	47.00	45.68	19.87	4.13	28.26	QP	400	10
5	813.600	36.56	-10.44	47.00	39.30	20.67	4.56	27.97	Peak	---	---

- Test Distance: 3M for 1GHz ~ 2GHz



Site : 03CH04-HY
 Condition: FCC CLASS-A 3m HF-ANT-10091 VERTICAL
 EUT :
 POWER :
 MODEL : HDSDI
 MEMO : 1920*1080 60Hz
 : 791011-04

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1010.000	45.64	-34.36	80.00	52.44	25.37	2.23	34.40	---	---	Peak
2	1483.000	46.18	-33.82	80.00	49.83	27.33	2.76	33.74	---	---	Peak
3	1715.000	45.67	-34.33	80.00	47.34	29.00	3.02	33.70	---	---	Peak
4 @	1758.000	47.13	-32.87	80.00	48.38	29.37	3.08	33.70	---	---	Peak
5	1802.000	45.03	-34.97	80.00	46.01	29.62	3.10	33.70	---	---	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-A 3m HF-ANT-10091 HORIZONTAL
 EUT :
 POWER :
 MODEL : HDSDI
 MEMO : 1920*1080 60Hz
 : 791011-04

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1290.000	45.68	-34.32	80.00	50.62	26.53	2.55	34.02	---	---
2 @	1715.000	46.78	-33.22	80.00	48.45	29.00	3.02	33.70	---	---
3 @	1758.000	47.24	-32.76	80.00	48.49	29.37	3.08	33.70	---	---
4	1803.000	44.28	-35.72	80.00	45.26	29.62	3.10	33.70	---	---
										Peak
										Peak
										Peak
										Peak

Test Engineer :

Verson
 Verson Wang

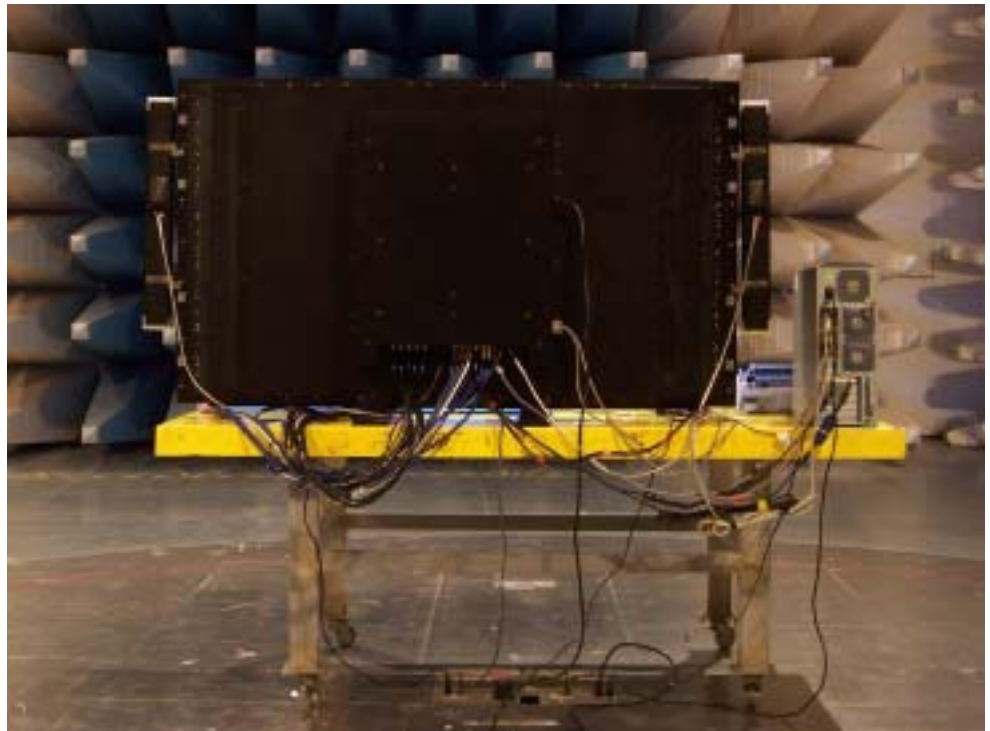
6.5 Photographs of Radiated Emission Test Configuration

- The photographs show the configuration that generates the maximum emission.

FRONT VIEW



REAR VIEW



7. List of Measuring Equipment Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9kHz – 2.75GHz	Jul. 14, 2007	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Mar. 29, 2007	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 30, 2007	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	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 04, 2006	Conduction (CO01-HY)
10m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-10M	10CH01-HY	30MHz~1GHz 10m, 3m	Apr. 14, 2007	Radiation (10CH01-HY)
Spectrum Analyzer	R&S	FSP7	838858/013	9kHz – 7GHz	Feb. 13, 2007	Radiation (10CH01- HY)
Receiver	R&S	ESI7	838496/009	9kHz-7GHz	Jan. 29, 2007	Radiation (10CH01-HY)
Amplifier	Aglient	8447D	2944A10825	100kHz – 1.3GHz	May. 24, 2007	Radiation (10CH01-HY)
Amplifier	Aglient	8447D	2944A10826	100kHz – 1.3GHz	May. 29, 2007	Radiation (10CH01-HY)
Biconical Antenna	Schwarzbeck	VHBB 9124	286	30MHz –200MHz	Aug. 14, 2007	Radiation (10CH01-HY)
Log Antenna	Schwarzbeck	VUSLP 9111	206	200MHz -1GHz	Aug. 14, 2007	Radiation (10CH01-HY)
Turn Table	HD	DT 60 RPS	1513/004/00	0 ~ 360 degree	N/A	Radiation (10CH01-HY)
Antenna Mast	HD	MA240	240/556/00	1 m - 4 m	N/A	Radiation (10CH01-HY)
Antenna Mast	HD	MA240	240/559/00	1 m - 4 m	N/A	Radiation (10CH01-HY)
RF Cable-R10m	BELDEN	RG8/U	CB023-INSIDE	30MHz~1GHz	Nov. 30, 2006	Radiation (10CH01-HY)
RF Cable-R10m	Suhner Switzerland + Rosenberger	RG223/U + UAA220A-0	CB022-DOOR	30MHz~1GHz	Nov.30, 2006	Radiation (10CH01-HY)
Spectrum Analyzer	R&S	FSP30	100792	9 kHz – 30GHz	Dec. 13, 2006	Radiation
Amplifier	Agilent	8449B	3008A02326	1 GHz - 26.5 GHz	Dec. 18, 2006	Radiation
Horn Antenna	EMCO	3115	6903	1GHz ~ 18GHz	Apr. 17, 2007	Radiation
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 02, 2006	Radiation

Calibration Interval of instruments listed above is one year.

8. Uncertainty of Test Site

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
combined standard uncertainty Uc(y)	1.30		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.60		

APPENDIX A. Photographs of EUT

