



Appendix Report

Compliance with Industry Canada Interference-Causing
Equipment Standard ICES-003

Product Name : Notebook PC

Model No. : UL20A, UL20FT, X23F, PRO23F

Applicant : ASUSTeK COMPUTER INC.

Address : No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Date of Receipt : 2010/04/12

Issued Date : 2010/04/23

Report No. : 104243R-ITUSP02V02

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, NVLAP, NIST or any agency of the Government.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 2010/04/23

Report No. : 104243R-ITUSP02V02



Product Name : Notebook PC

Applicant : ASUSTeK COMPUTER INC.

Address : No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Manufacturer : 1. PEGATRON CORPORATION Taoyuan Mfg
2. Protek (Shanghai) Limited.
3. NorthTec Asia (Shanghai) Limited.
4. FULIN ELECTRONICAL TECHNOLOGY (CHANGSHU) CO., LTD

Model No. : UL20A, UL20FT, X23F, PRO23F

EUT Rated Voltage : AC 100-240V, 50-60Hz


EUT Test Voltage : AC 120 V / 60 Hz


Trade Name : ASUS

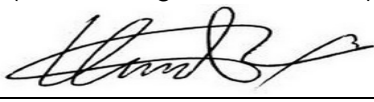
Applicable Standard : FCC CFR Title 47 Part 15 Subpart B: 2009, Class B
CISPR 22: 2008, ANSI C63.4: 2003
ICES-003 Issue 4: 2004

Test Result : Complied

Performed Location : Quietek Corporation (Linkou Laboratory)
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We , **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scopes:

Taiwan R.O.C.	:	BSMI, NCC, TAF
Germany	:	TUV Rheinland
Norway	:	Nemko, DNV
USA	:	FCC, NVLAP
Japan	:	VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://tw.quietek.com/tw/emc/accreditations/accreditations.htm>
The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
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TABLE OF CONTENTS

Description	Page
1. General Information	5
1.1. EUT Description.....	5
1.2. Mode of Operation	6
1.3. Tested System Details	7
1.4. Configuration of Tested System	11
1.5. EUT Exercise Software.....	12
2. Technical Test	13
2.1. Summary of Test Result.....	13
2.2. List of Test Equipment	14
2.3. Measurement Uncertainty.....	15
2.4. Test Environment.....	16
3. Conducted Emission	17
3.1. Test Specification	17
3.2. Test Setup.....	17
3.3. Limit	17
3.4. Test Procedure	18
3.5. Test Result	19
3.6. Test Photograph	25
4. Radiated Emission.....	26
4.1. Test Specification	26
4.2. Test Setup.....	26
4.3. Limit	27
4.4. Test Procedure	28
4.5. Test Result	29
4.6. Test Photograph	34
5. Attachment.....	36
EUT Photograph.....	36

1. General Information

1.1. EUT Description

Product Name	Notebook PC
Trade Name	ASUS
Model No.	UL20A, UL20FT, X23F, PRO23F

Component	
Power Adapter (1)	MFR: DELTA, M/N: ADP-65JH BB Input: AC 100-240V, 50-60Hz, 1.5A Output: DC 19V, 3.42A Cable Out: Non-Shielded, 1.8m, with one ferrite core bonded.
Power Adapter (2)	MFR: ENERTRONIX, M/N: EXA0703YH Input: AC 100-240V, 50-60Hz, 1.5A Output: DC 19V, 3.42A Cable Out: Non-Shielded, 1.8m, with one ferrite core bonded.
Power Adapter (3)	MFR: LITEON, M/N: PA-1650-67 Input: AC 100-240V, 50-60Hz, 2.0A Output: DC 19V, 3.42A Cable Out: Non-Shielded, 1.8m, with one ferrite core bonded.

Keyparts List		
Component	Vendor / Model Name	Remark
CPU (Pin: 1288pin)	INTEL / INT I3-330UM 1.2G	INT I3-330UM 1.2G/3M SLBUG BGA
	INTEL / INT U3400 1.06G	INT U3400 1.06G/2MB SLBUE BGA
HDD (2.5")	SEAGATE / ST9640320AS	SATA CAMERON 640G 5400R 2.5'
	WD / WD5000BEVT	SATA SCORPIO ML320 500G 5400R
	WD / WD6400BEVT	SATA SCORPIO ML320 640G 5400R
	SAMSUNG / HM251HI	SATA WYATT 250G 5400R 2.5'
	SAMSUNG / HM321HI	SATA WYATT 320G 5400R 2.5'
	SAMSUNG / HM501II	SATA WYATT 500G 5400R 2.5'
	SAMSUNG / HM641JI	SATA CAMERON 640G 5400R 2.5'
BT	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)	BLUETOOTH 2.1 BCM2070 MODULE
CMOS	SUYIN / CN031B-S233-MI01	CMOS CAMERA MODULE 0.3M FIX

Note:

1. This appendix report was based on Quietek report No. 102016R-ITUSP02V02.
2. The EUT is including four models for different marketing requirement.
3. The different is adding CPU 、HDD 、BT 、CMOS and Model Number.

1.2. Mode of Operation

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre-Test Mode	
Mode 1	
Mode 2	
Mode 3	
Mode 4	
Mode 5	
Mode 6	
Mode 7	
Final Test Mode	
Emission	Mode 1

ITEM	Mode 1 LCD+D-SUB 1366*768/60Hz	Mode 2 LCD+HDMI 1366*768/60Hz
Motherboard	ASUS / UL20FT	ASUS / UL20FT
CPU	INTEL / I3-330UM 1.2G	INTEL / INT I3-330UM 1.2G
LCD	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1
Memory- Slot 1	HYNIX / HMT125S6TFR8C-H9 DDRIII 1333 2G	ASINT / SSZ3128M8-EDJED DDRIII 1333 2GB
Memory- Slot 2	KINGSTON / ASU1333D3S9DR8/2G DDRIII 1333 2G	ELPIDA / EBJ21UE8BDS0-DJ-F DDRIII 1333 2GB
HDD	SATA SCORPIO ML320 640G 5400R WD / WD6400BEVT	SATA SCORPIO ML320 500G 5400R WD / WD5000BEVT
Main Battery	CPT(Trade mark : ASUS),A32-UL20 +10.8V, 4400mAh, 47W	CPT(Trade mark : ASUS),A32-UL20 +11.25V,5600mAh, 63W
Keyboard	KEYBOARD 284mm ISOLATION (CHICONY)	KEYBOARD 284mm ISOLATION (CHICONY)
WLAN/WiMAX	INTEL / 112BNHWW	Atheros / AR5B95 (AZWAVE/AW-NE785H)
Camera	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01
TouchPad	SYNAPTICS / TM-00450-011	SYNAPTICS / TM-00450-011
Bluetooth	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)
Adapter(65W)	ENERTRONIX / EXA0703YH	DELTA / ADP-65JH BB

ITEM	Mode 3 LCD+HDMI 1366*768/60Hz	Mode 4 LCD+D-SUB 1366*768/60Hz
Motherboard	ASUS / UL20FT	ASUS / UL20FT
CPU	INTEL / INT U3400 1.06G	INT I3-330UM 1.2G
LCD	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1
Memory- Slot 1	HYNIX/HMT112S6TFR8C-H9 DDRIII 1333 1GB	DDRIII 1333 2G HYNIX / HMT125S6TFR8C-H9
Memory- Slot 2	ASINT/SSY3128M8-EDJED DDRIII 1333 1GB	DDRIII 1333 2G KINGSTON / ASU1333D3S9DR8/2G
HDD	SATA CAMERON 640G 5400R 2.5' SEAGATE / ST9640320AS	SAMSUNG / HM251HI SATA WYATT 250G 5400R 2.5'
Main Battery	CPT(Trade mark : ASUS),A32-UL20 +10.8V, 4400mAh, 47W	CPT(Trade mark : ASUS),A32-UL20 +10.8V,4400mAh, 47W
Keyboard	KEYBOARD 284mm ISOLATION (DARFON)	KEYBOARD 284mm ISOLATION (CHICONY)
WLAN/WiMAX	Atheros / AR5B95 (AZWAVE / AW-NE785H)	INTEL / 112BNHFW
Camera	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01-2
TouchPad	SYNAPTICS / TM-00450-011	SYNAPTICS / TM-00450-011
Bluetooth	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)
Adapter(65W)	LITEON / PA-1650-67	ENERTRONIX / EXA0703YH

ITEM	Mode 5 LCD+HDMI 1366*768/60Hz	Mode 6 LCD+HDMI 1366*768/60Hz
Motherboard	ASUS / UL20FT	ASUS / UL20FT
CPU	INT I3-330UM 1.2G	INT U3400 1.06G
LCD	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1
Memory- Slot 1	DDRIII 1333 2GB ASINT / SSZ3128M8-EDJED	DDRIII 1333 1GB HYNIX / HMT112S6TFR8C-H9
Memory- Slot 2	DDRIII 1333 2GB ELPIDA / EBJ21UE8BDS0-DJ-F	DDRIII 1333 1GB ASINT / SSY3128M8-EDJED
HDD	SAMSUNG / HM321HI SATA WYATT 320G 5400R 2.5'	SAMSUNG / HM501II SATA WYATT 500G 5400R 2.5'
Main Battery	CPT(Trade mark : ASUS),A32-UL20 +11.25V,5600mAh, 63W	CPT(Trade mark : ASUS),A32-UL20 +10.8V,4400mAh, 47W
Keyboard	KEYBOARD 284mm ISOLATION (CHICONY)	KEYBOARD 284mm ISOLATION (DARFON)
WLAN/WiMAX	Atheros / AR5B95 (AZWAVE/AW-NE785H)	Atheros / AR5B95 (AZWAVE/AW-NE785H)
Camera	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01-2	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01-2
TouchPad	SYNAPTICS / TM-00450-011	SYNAPTICS / TM-00450-011
Bluetooth	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)
Adapter(65W)	DELTA / ADP-65JH BB	LITEON / PA-1650-67

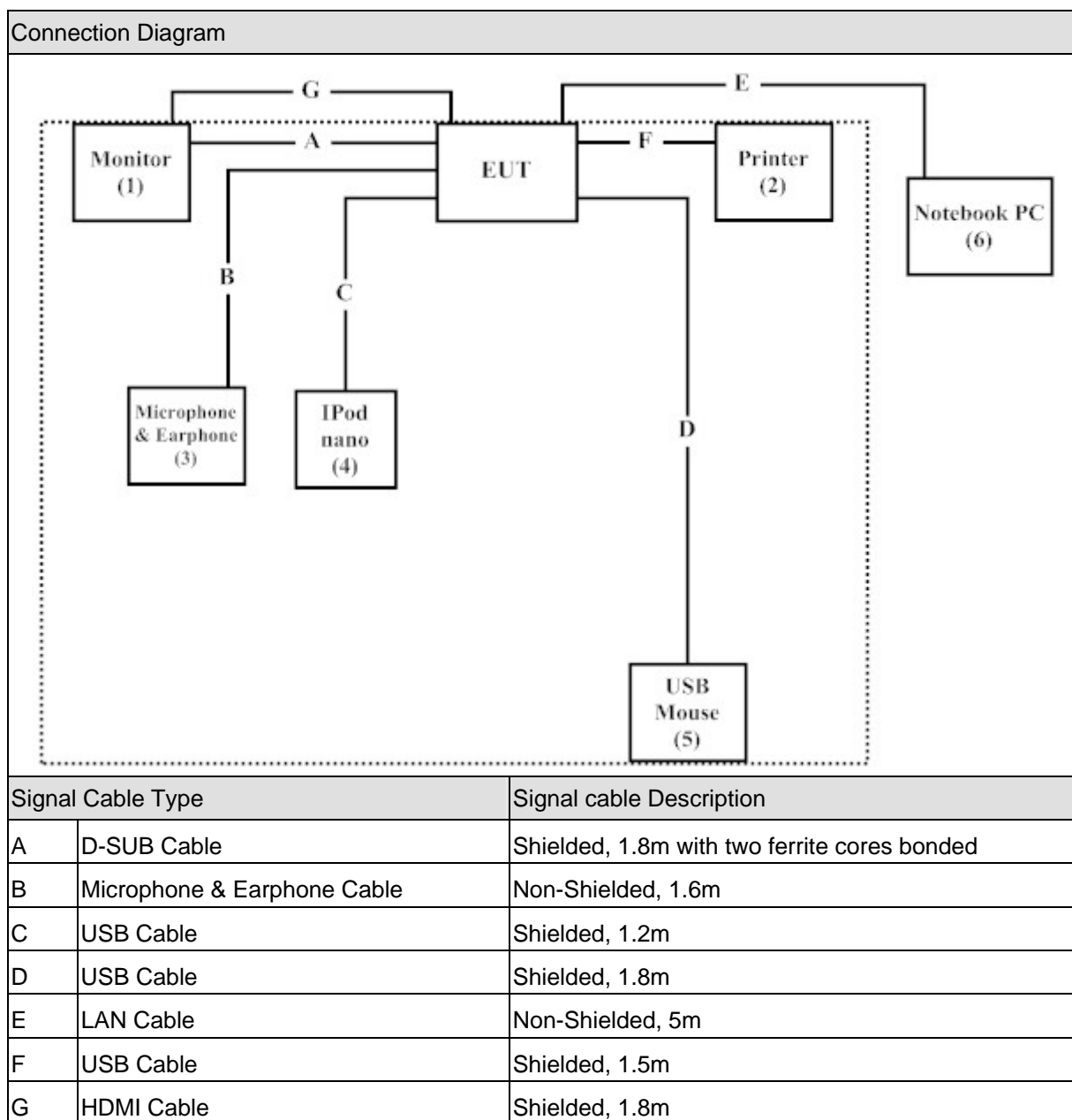
ITEM	Mode 7 LCD+D-SUB 1366*768/60Hz
Motherboard	ASUS / UL20FT
CPU	INT I3-330UM 1.2G
LCD	UL20FT-2C LCD 12.1 HD GL(LED) HANNSTAR / HSD121PHW1
Memory- Slot 1	DDRIII 1333 2G HYNIX / HMT125S6TFR8C-H9
Memory- Slot 2	DDRIII 1333 2G KINGSTON / ASU1333D3S9DR8/2G
HDD	SAMSUNG / HM641JI SATA CAMERON 640G 5400R 2.5'
Main Battery	CPT(Trade mark : ASUS),A32-UL20 +10.8V,4400mAh, 47W
Keyboard	KEYBOARD 284mm ISOLATION (CHICONY)
WLAN/WiMAX	INTEL / 112BNHMW
Camera	CMOS CAMERA MODULE 0.3M FIX SUYIN / CN031B-S233-MI01-2
TouchPad	SYNAPTICS / TM-00450-011
Bluetooth	Broadcom / BCM92070MD_REF (AZWAVE / BT-270)
Adapter(65W)	ENERTRONIX / EXA0703YH

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Monitor	DELL	U2410	CN-0J257M-728-01I-04NL	Non-Shielded, 1.8m
2 Printer	EPSON	StyLus C63	FAPY094256	Non-Shielded, 1.8m
3 Microphone & Earphone	PCHOME	N/A	N/A	N/A
4 IPod nano	Apple	A1236	YM827ENKY0P	N/A
5 USB Mouse	Logitech	M-BE58	HCA24311471	N/A
6 Notebook PC	DELL	D630	00144-023-351-375	Non-Shielded, 1.8m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and peripheral as shown on Figure
2	Connect the power to EUT and peripherals, then turn on the power of all equipments.
3	Waiting for EUT to enter Windows System, and adjust the display resolution to the test mode.
4	Connect LAN and Telecom to Notebook PC for transmitting data.
5	Activate Wireless & Bluetooth interface function, and perform the wireless data communication with the other Notebook (write/delete action).
6	Personal Computer sends “H” pattern to printer, the printer will print “H” pattern on paper.
7	Run “H” pattern.
8	Begin to test and repeat the above procedure (4)~(7)

2. Technical Test

2.1. Summary of Test Result

- ☒ No deviations from the test standards
- ☐ Deviations from the test standards as below description:

Emission			
Performed Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart B: 2009 Class B, ANSI C63.4: 2003	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart B: 2009 Class B, ANSI C63.4: 2003	Yes	No

2.2. List of Test Equipment

Conducted Emission / SR1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
EMI Test Receiver	R&S	ESCS 30	100366	2009/10/29
LISN	R&S	ENV4200	833209/007	2009/08/14
LISN	R&S	ENV216	100085	2010/02/17
Pulse Limiter	R&S	ESH3-Z2	357.88.10.52	2009/09/10

Radiated Emission / Site3

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2704	2009/08/01
Broadband Horn Antenna	Schwarzbeck	BBHA9170	209	2009/07/25
EMI Test Receiver	R&S	ESCS 30	100149	2010/01/14
Horn Antenna	Schwarzbeck	BBHA9120D	305	2009/08/26
Pre-Amplifier	QTK	N/A	N/A	2009/08/01
Spectrum Analyzer	Advantest	R3162	100803470	2009/11/24
EMI Test Receiver	R&S	ESI 26	838786/004	2009/06/26
Pre-Amplifier	MITEQ	QMF-4D-18040 0-45-6P	925974	2010/01/03

2.3. Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

2.4. Test Environment

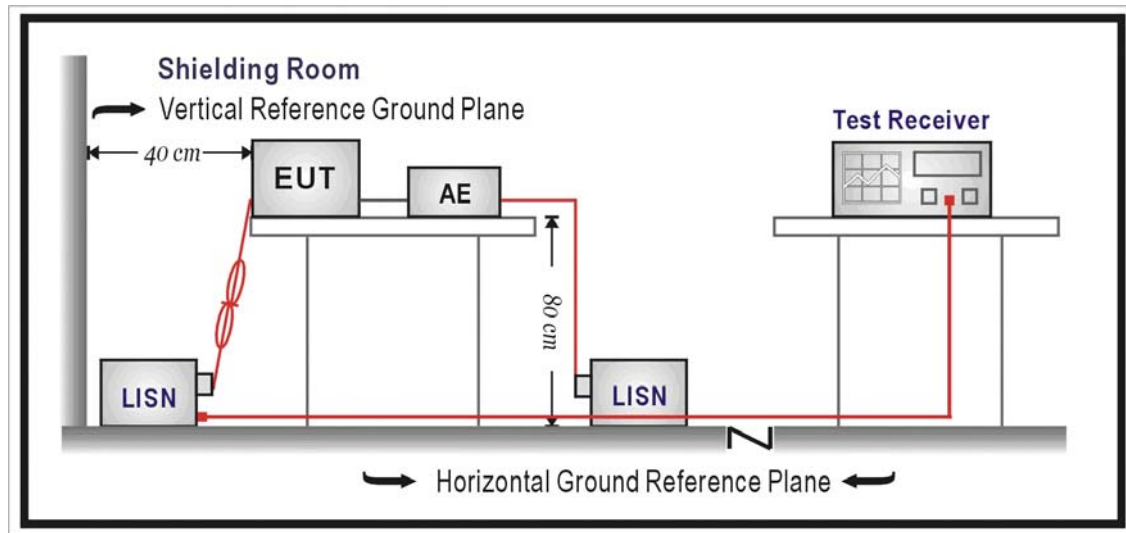
Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000
Radiated Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	50
	Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

3.1. Test Specification

According to Standard : FCC Part 15 Subpart B, ANSI C63.4

3.2. Test Setup



3.3. Limit

Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.

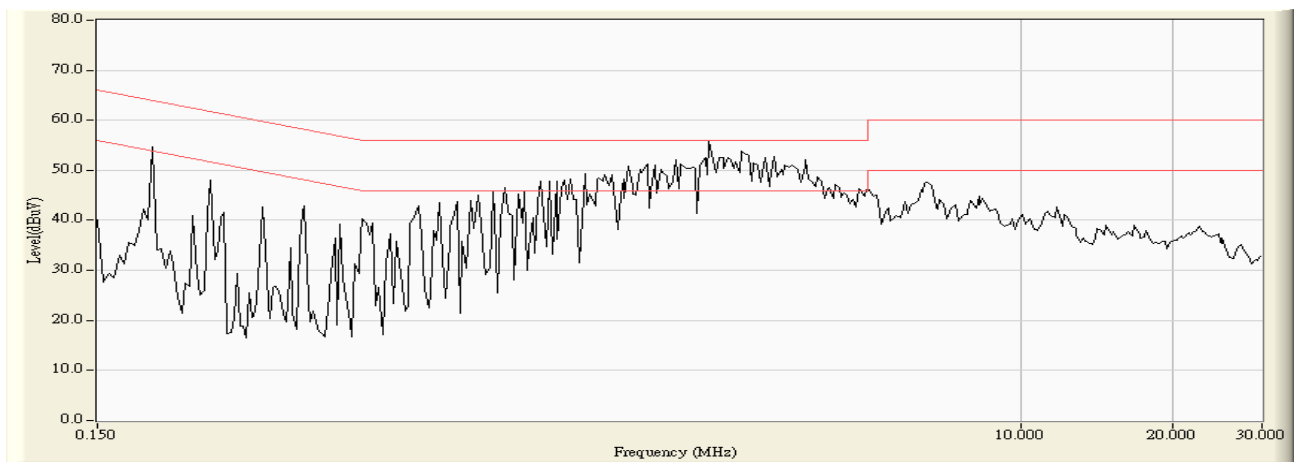
(Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed on conducted measurement.

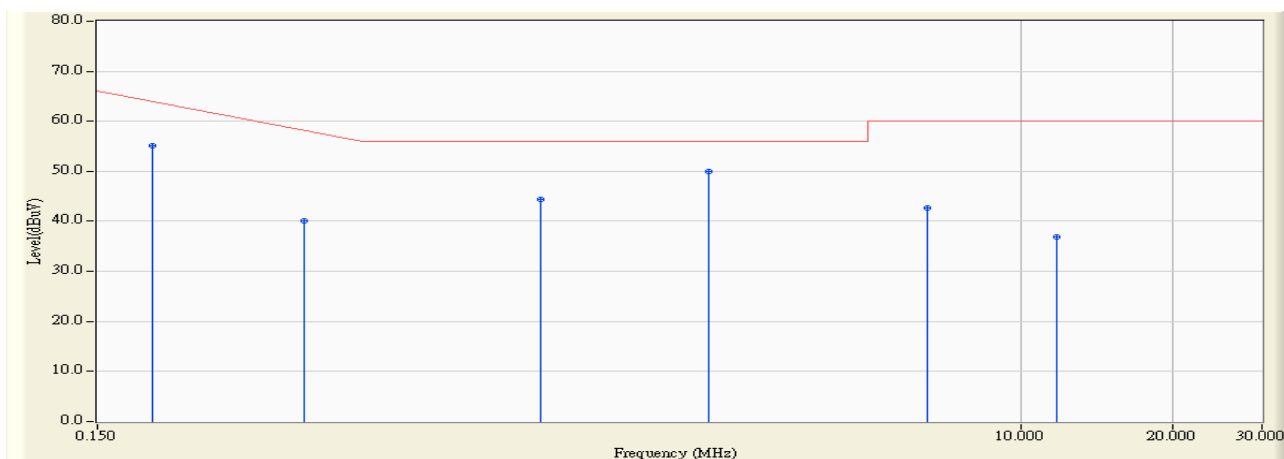
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Test Result

Site : SR1	Time : 2010/04/15 - 23:03
Limit : CISPR_B_00M_QP	Margin : 10
EUT : Notebook PC	Probe : ENV_216_L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1



Site : SR1	Time : 2010/04/15 - 23:04
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Notebook PC	Probe : ENV_216_L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1

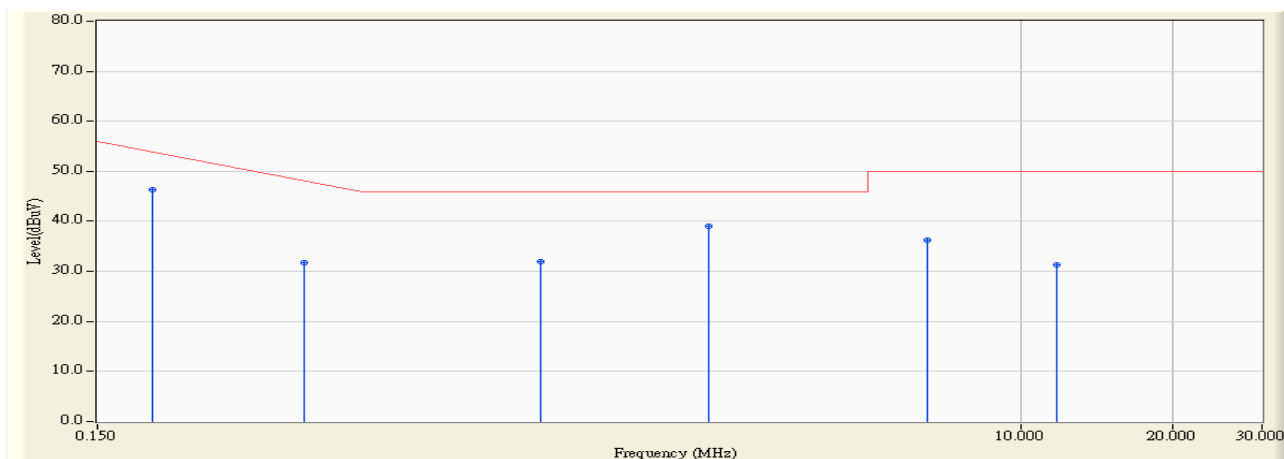


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.790	45.240	55.030	-9.741	64.771	QUASIPeAK
2		0.384	9.790	30.240	40.030	-19.284	59.314	QUASIPeAK
3		1.127	9.800	34.490	44.290	-11.710	56.000	QUASIPeAK
4	*	2.427	9.810	40.060	49.870	-6.130	56.000	QUASIPeAK
5		6.548	9.850	32.800	42.650	-17.350	60.000	QUASIPeAK
6		11.767	9.946	26.920	36.866	-23.134	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	Time : 2010/04/15 - 23:04
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Notebook PC	Probe : ENV_216_L1 - Line1
Power : AC 120V/60Hz	Note : Mode 1

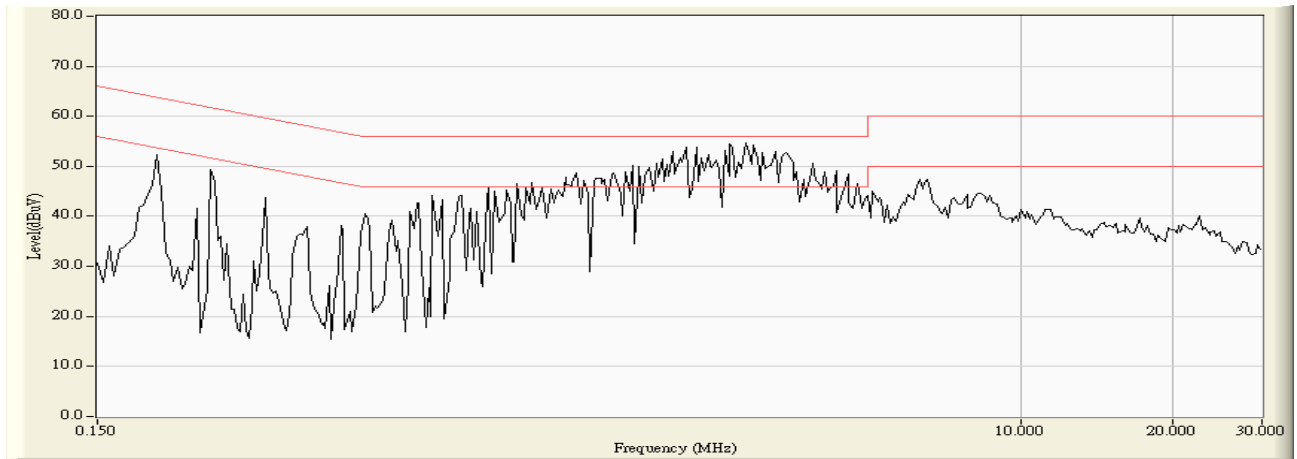


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.790	36.450	46.240	-8.531	54.771	AVERAGE
2		0.384	9.790	21.940	31.730	-17.584	49.314	AVERAGE
3		1.127	9.800	22.070	31.870	-14.130	46.000	AVERAGE
4	*	2.427	9.810	29.130	38.940	-7.060	46.000	AVERAGE
5		6.548	9.850	26.460	36.310	-13.690	50.000	AVERAGE
6		11.767	9.946	21.340	31.286	-18.714	50.000	AVERAGE

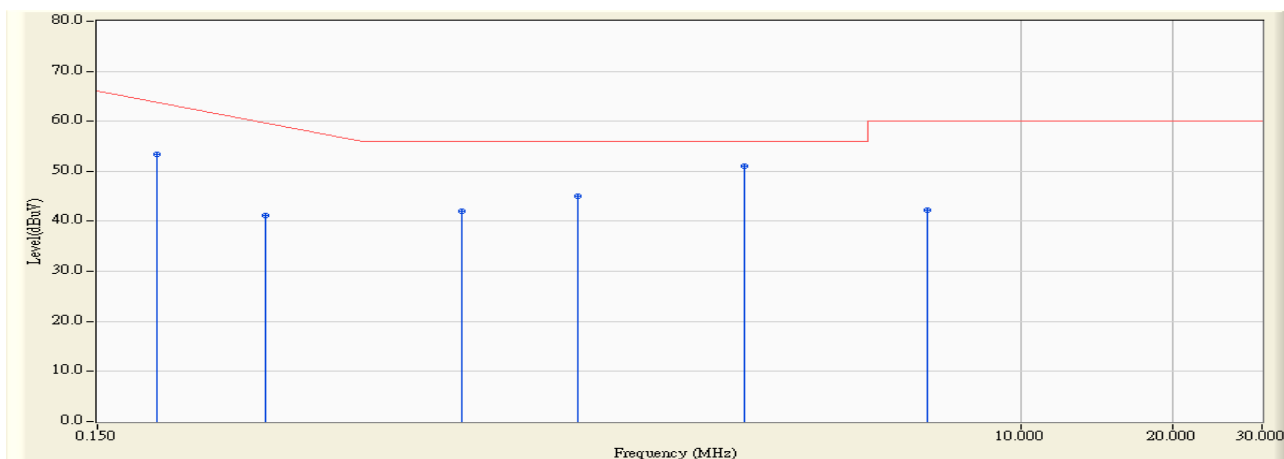
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	Time : 2010/04/15 - 23:04
Limit : CISPR_B_00M_QP	Margin : 10
EUT : Notebook PC	Probe : ENV_216_N - Line2
Power : AC 120V/60Hz	Note : Mode 1



Site : SR1	Time : 2010/04/15 - 23:05
Limit : CISPR_B_00M_QP	Margin : 0
EUT : Notebook PC	Probe : ENV_216_N - Line2
Power : AC 120V/60Hz	Note : Mode 1

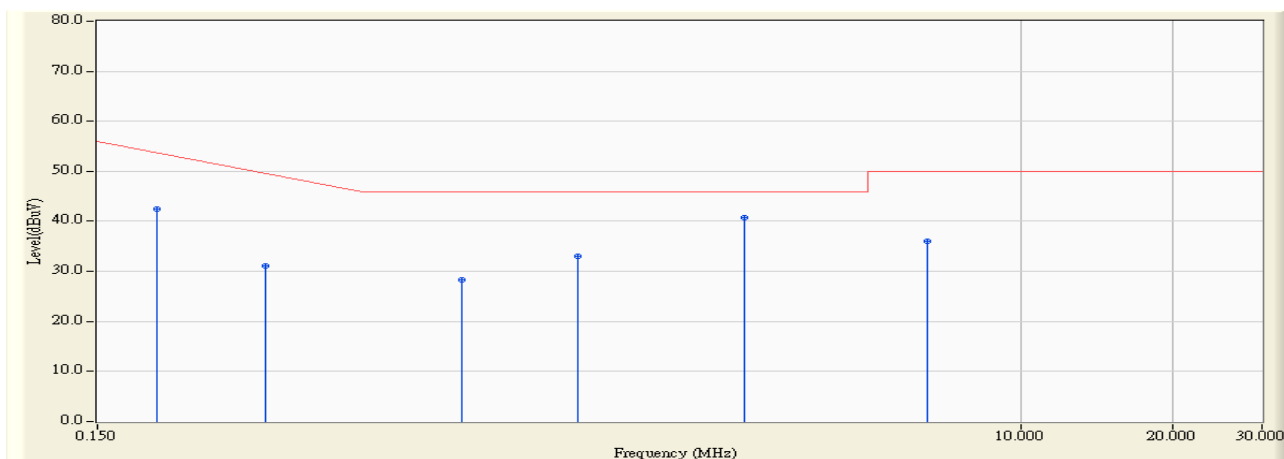


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.780	43.730	53.510	-11.147	64.657	QUASIPeAK
2		0.322	9.790	31.340	41.130	-19.956	61.086	QUASIPeAK
3		0.787	9.790	32.220	42.010	-13.990	56.000	QUASIPeAK
4		1.330	9.790	35.330	45.120	-10.880	56.000	QUASIPeAK
5	*	2.857	9.810	41.170	50.980	-5.020	56.000	QUASIPeAK
6		6.548	9.850	32.310	42.160	-17.840	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : SR1	Time : 2010/04/15 - 23:05
Limit : CISPR_B_00M_AV	Margin : 0
EUT : Notebook PC	Probe : ENV_216_N - Line2
Power : AC 120V/60Hz	Note : Mode 1



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.780	32.630	42.410	-12.247	54.657	AVERAGE
2		0.322	9.790	21.290	31.080	-20.006	51.086	AVERAGE
3		0.787	9.790	18.620	28.410	-17.590	46.000	AVERAGE
4		1.330	9.790	23.190	32.980	-13.020	46.000	AVERAGE
5	*	2.857	9.810	30.910	40.720	-5.280	46.000	AVERAGE
6		6.548	9.850	26.140	35.990	-14.010	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3.6. Test Photograph

Test Mode : Mode 1

Description : Front View of Conducted Test



Test Mode : Mode 1

Description : Back View of Conducted Test



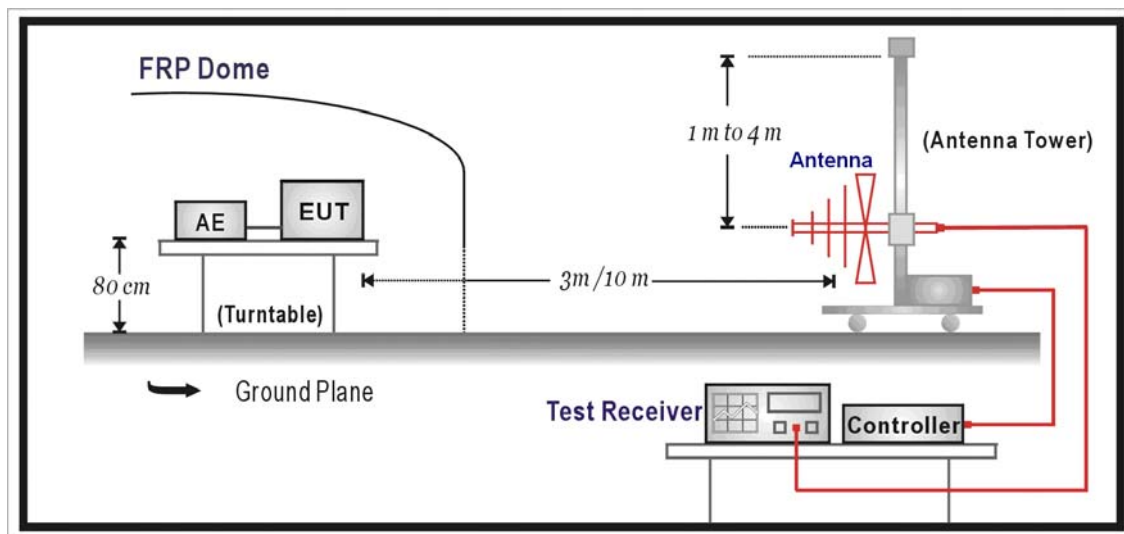
4. Radiated Emission

4.1. Test Specification

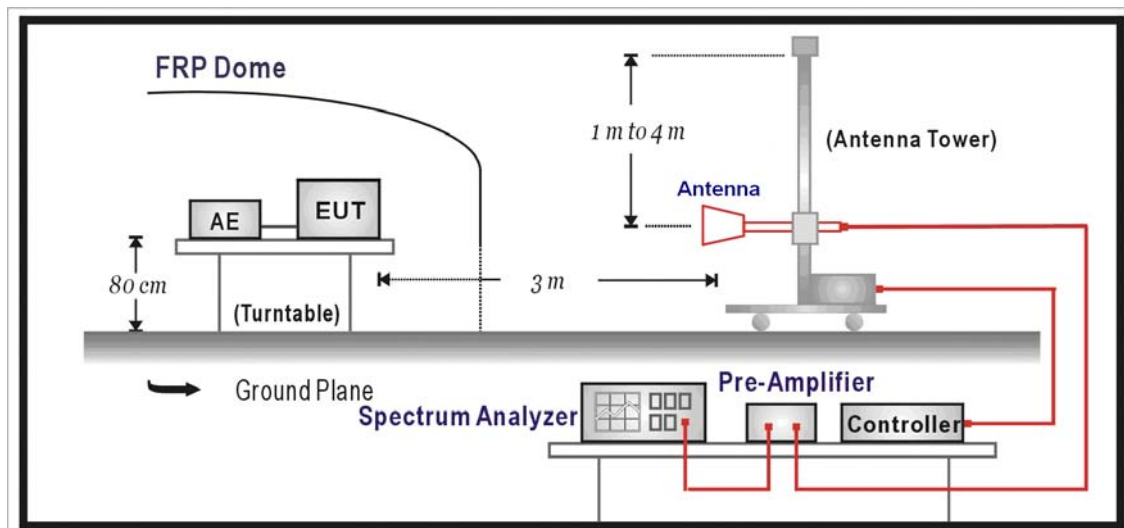
According to EMC Standard : FCC Part 15 Subpart B, ANSI C63.4

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

Under 1GHz test shall not exceed the following value:

Limits		
Frequency (MHz)	Distance (m)	dBuV/m
30 – 230	10	30
230 – 1000	10	37

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Above 1GHz test shall not exceed the following value:

FCC Part 15 Subpart B Paragraph 15.109 Limits (dBuV/m)		
Frequency (MHz)	Distance (m)	dBuV/m
30-88	3	40
88-216	3	43.5
216-960	3	46
Above 960	3	54

Remark:

1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.

The turn table can rotate 360 degrees to determine the position of the maximum emission level and the antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

On any frequency or frequencies below or equal to 1000 MHz, the radiated limits shown are based on measuring equipment employing a quasi-peak detector function and above 1000 MHz, the radiated limits shown are based measuring equipment employing an average detector function.

When average radiated emission measurement are included emission measurement Above 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

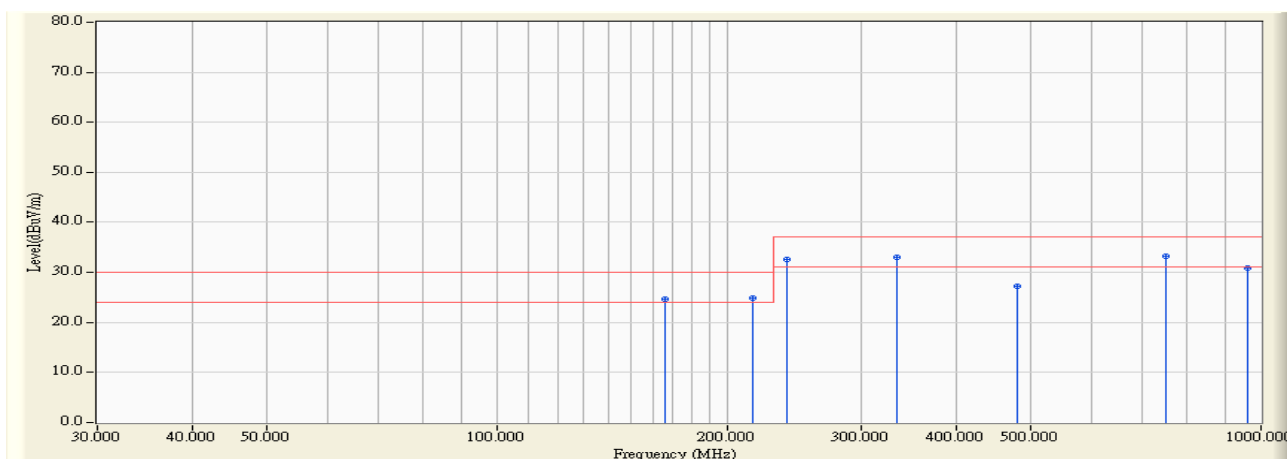
For class A, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and above 1GHz.

For class B, the measurement distance between the EUT and antenna is 10 meters for under 1GHz and 3 meters for above 1GHz.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30) is 120 kHz and above 1GHz is 1MHz.

4.5. Test Result

Site : OATS-3	Time : 2010/04/26 - 15:19
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Notebook PC	Probe : Site3_CBL6112_10M_0811 - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1

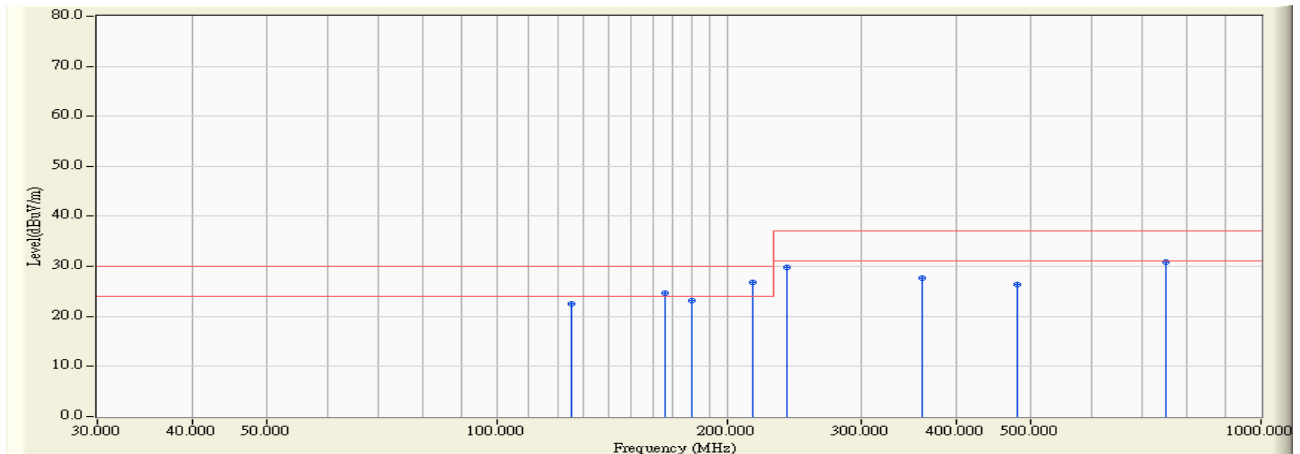


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		165.735	12.982	11.700	24.683	-5.317	30.000	QUASIPeAK
2		216.000	13.863	11.000	24.863	-5.137	30.000	QUASIPeAK
3		240.000	15.590	17.000	32.590	-4.410	37.000	QUASIPeAK
4		334.540	18.329	14.700	33.029	-3.971	37.000	QUASIPeAK
5		480.011	21.668	5.500	27.169	-9.831	37.000	QUASIPeAK
6	*	750.048	25.603	7.700	33.303	-3.697	37.000	QUASIPeAK
7		959.999	28.486	2.500	30.985	-6.015	37.000	QUASIPeAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-3	Time : 2010/04/26 - 15:18
Limit : CISPR_B_10M_QP	Margin : 6
EUT : Notebook PC	Probe : Site3_CBL6112_10M_0811 - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1

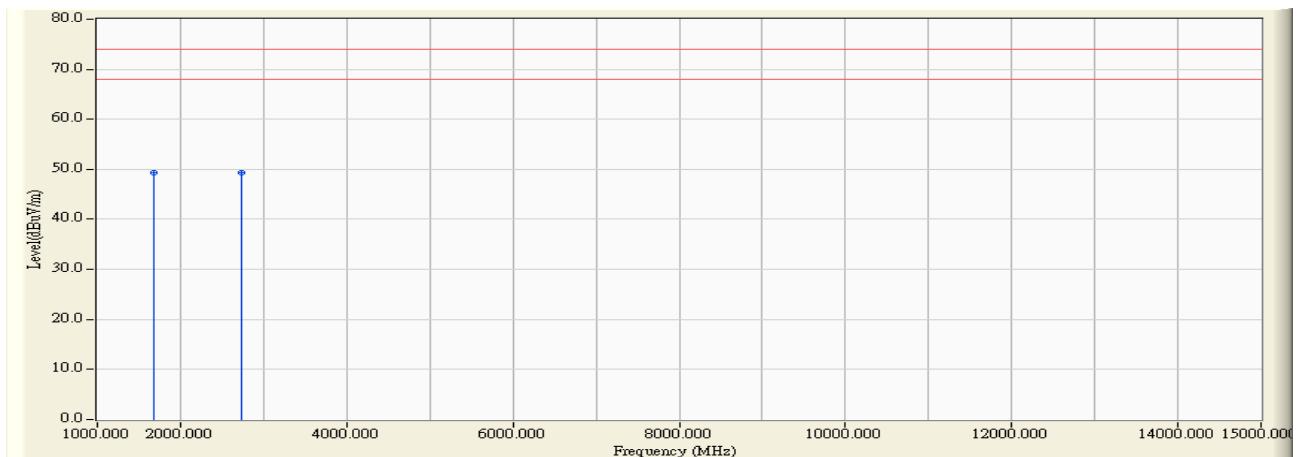


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		125.008	15.012	7.600	22.612	-7.388	30.000	QUASIPeAK
2		165.665	12.986	11.600	24.586	-5.414	30.000	QUASIPeAK
3		180.000	12.427	10.700	23.127	-6.873	30.000	QUASIPeAK
4	*	216.000	13.863	13.000	26.863	-3.137	30.000	QUASIPeAK
5		240.000	15.590	14.200	29.790	-7.210	37.000	QUASIPeAK
6		360.000	19.006	8.600	27.606	-9.394	37.000	QUASIPeAK
7		480.003	21.668	4.800	26.468	-10.532	37.000	QUASIPeAK
8		750.048	25.603	5.200	30.803	-6.197	37.000	QUASIPeAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-3	Time : 2010/04/16 - 01:05
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Notebook PC	Probe : 9120D_1-18G_Horn - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1

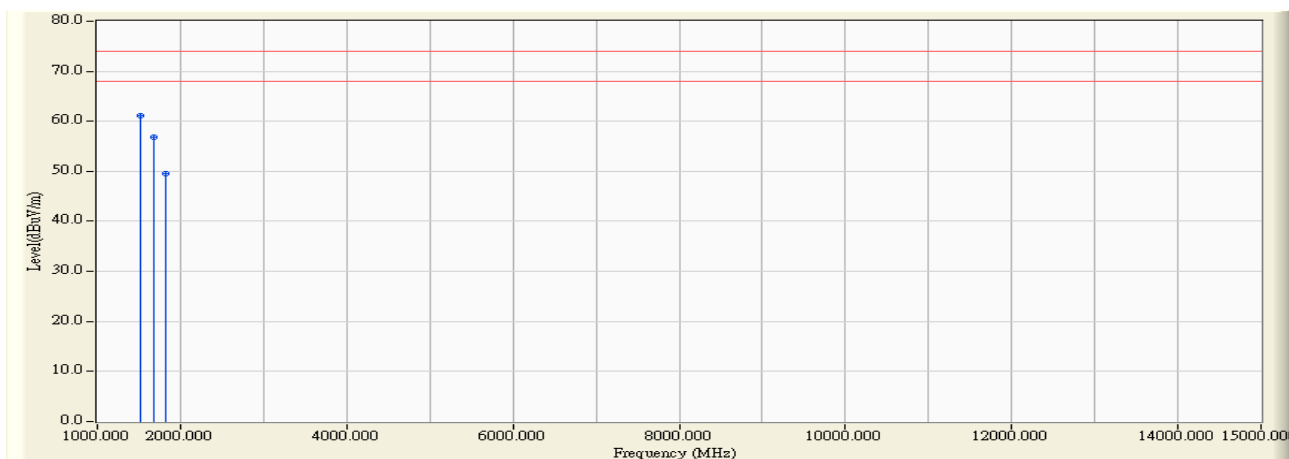


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1671.000	-4.272	53.500	49.229	-24.771	74.000	PEAK
2		2733.000	-0.577	49.800	49.223	-24.777	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-3	Time : 2010/04/16 - 01:11
Limit : FCC_B_(Above_1G)_03M_PK	Margin : 6
EUT : Notebook PC	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1

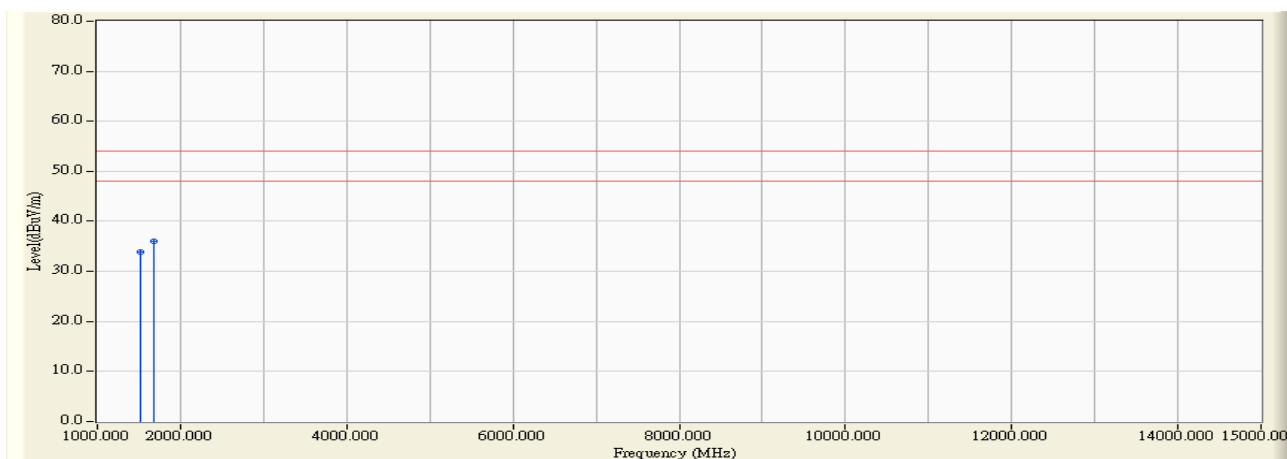


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1511.000	-4.722	65.900	61.178	-12.822	74.000	PEAK
2		1671.000	-4.272	61.200	56.929	-17.071	74.000	PEAK
3		1831.000	-4.073	53.700	49.626	-24.374	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : OATS-3	Time : 2010/04/16 - 01:17
Limit : FCC_B_(Above_1G)_03M_AV	Margin : 6
EUT : Notebook PC	Probe : 9120D_1-18G_Horn - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1511.000	-4.722	38.600	33.878	-20.122	54.000	AVERAGE
2	*	1671.000	-4.272	40.200	35.929	-18.071	54.000	AVERAGE

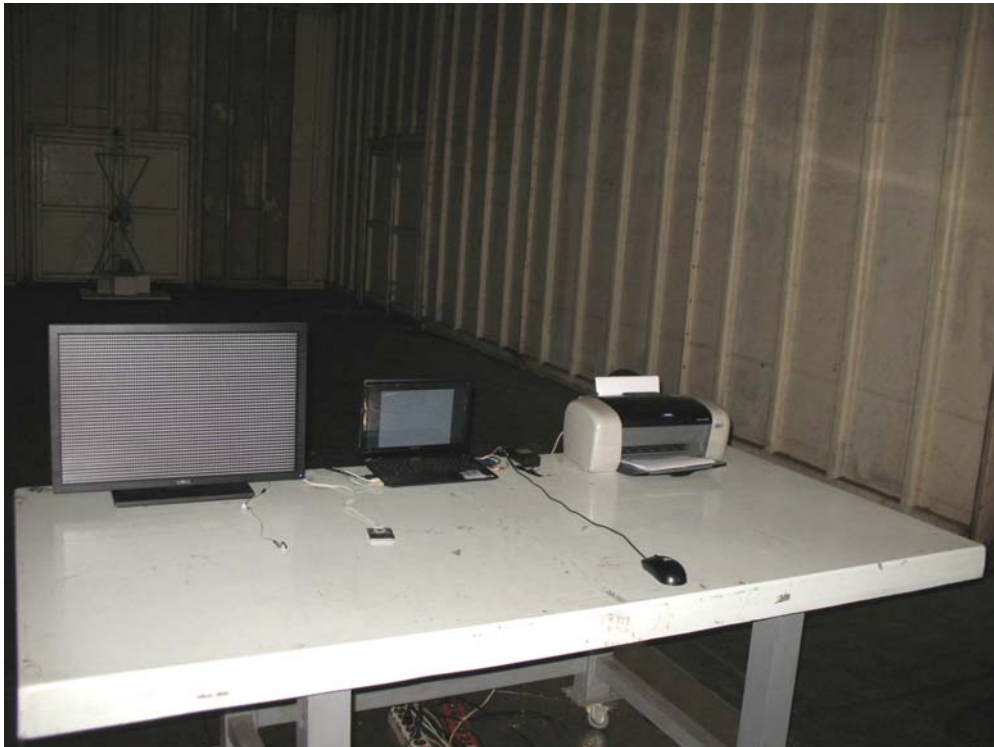
Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

4.6. Test Photograph

Test Mode : Mode 1

Description : Front View of Radiated Test



Test Mode : Mode 1

Description : Back View of Radiated Test



Test Mode : Mode 1

Description : Front View of High Frequency Radiated Test



5. Attachment

➤ EUT Photograph

(1) EUT Photo



(2) EUT Photo



A side-profile view of the closed HP Spectre x360 14-inch laptop. The device is black and shown against a blue background. The hinge mechanism is visible, and the bottom edge of the laptop features a series of ventilation grilles, a USB-C port, a USB-A port, and two circular ports (likely for audio).

A side-profile view of the HP Pavilion 15-010TX laptop, showing the rear panel. The laptop is black and is positioned against a blue background. The rear panel features a variety of ports: a large rectangular port (likely for a display or docking station), two USB ports, a VGA port, an Ethernet port, and a circular port (likely for a power jack or audio). The HP logo is visible on the right side of the rear panel.

(5) EUT Photo



(6) EUT Photo



DELTA

AC/DC ADAPTER (電源适配器/交換式電源供應器)

MODEL (型号/型號): ADP-65JH BB
 INPUT (輸入/輸入): 100-240V ~ 1.5A(1.5A) 50-60 Hz LPS
 OUTPUT (輸出/輸出): 19V = 3.42A(3.42A) Ⓞ-Ⓞ-Ⓞ
 Apparaat mit kun tilkoplet jorden stikkontakt.
 Laite on liitetävä suojamaadoituskoskettimilla varustettuun pistoraasiaan.

PRECAUCION PARA USO CON EQUIPOS DE TECNOLOGIA DE LA INFORMACION

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Mr. Name : DELTA ELECTRONICS (JIANG SU), LTD.
 AIS Center : (82)2-702-5168

製造商: 台達電子科技股份有限公司

C.C.: **F** REV.: **01** DCWP CM-2

S/N: **660W99W001F**

Barcode

A black rectangular power adapter, likely for a portable electronic device, is shown against a blue background. The adapter has a coiled black cable extending from its top. The cable ends in a standard two-prong AC power plug. The adapter itself has a small circular vent or indicator light on its side.

(9) EUT Photo



(10) EUT Photo



(11) EUT Photo



(12) EUT Photo



(13) EUT Photo

