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FCC 15B TEST REPORT

REPORT NO.: FD991116C19-1

MODEL NO.: HW0303W

RECEIVED: Nov. 16, 2010

TESTED: Nov. 18 ~ Nov. 19, 2010

ISSUED: Nov. 23, 2010

APPLICANT : Aibelive Co., Ltd

ADDRESS : 3F., No. 71, Jhou-zih St., Neu-hu District, Taipei
City 114, Taiwan

ISSUED BY : Bureau Veritas Consumer Products Services (H.K.)
Ltd., Taoyuan Branch

LAB ADDRESS : No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang,
Taipei Hsien 244, Taiwan, R.O.C.

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1 CERTIFICATION

PRODUCT: AIWI joystick 2nd generation

MODEL NO.: HW0303W

BRAND: AIWI

APPLICANT: Aibelive Co., Ltd

TESTED: Nov. 18 ~ Nov. 19, 2010

TEST SAMPLE: ENGINEERING SAMPLE

STANDARD: FCC Part 15, Subpart B, Class B

CISPR 22: 1997, Class B

ICES-003: 2004, Class B

ANSI C63.4: 2003

The above equipment (model: HW0303W) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : , **DATE :** Nov. 23, 2010
Andrea Hsia / Specialist

TECHNICAL

ACCEPTANCE : , **DATE :** Nov. 23, 2010
Responsible for EMI Ban Hsieh / Supervisor

APPROVED BY : , **DATE :** Nov. 23, 2010
David Liu / Senior Engineer



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2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications.

EMISSION			
Standard	Test Type	Result	Remarks
FCC Part 15, Subpart B, Class B CISPR 22: 1997, Class B ICES-003: 2004, Class B	Conducted emission test	PASS	Meet the requirement of limit Minimum passing margin is -19.72dB at 1.656MHz.
	Radiated emission test	PASS	Meet the requirement of limit Minimum passing margin is -5.92dB at 996.11MHz.

Note: The limit for radiated test for 30-1000 MHz was performed according to CISPR 22: 1997, which was specified in FCC PART 15 Subpart B 15.109(g). Also the limits of ICES-003: 2004 and CISPR 22: 1997 are same.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	4.12 dB
	200MHz ~1000MHz	4.12 dB
	Above 1GHz	2.26 dB

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



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3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	AIWI joystick 2nd generation
MODEL NO.	HW0303W
POWER SUPPLY	5Vdc
DATA CABLE	NA
ACCESSORY DEVICES	NA

NOTE:

1. A set of the EUT include joystick and dongle. This report covers dongle only. The joystick is covered in another test report which report no.: FD991116C19.

MODEL	REPORT NO.	DESCRIPTION
HW0302W	FD991116C19	For Joystick
HW0303W	FD991116C19-1	For Dongle

2. The EUT's highest operating frequency is 2480 MHz.
3. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Typical test configuration.

3.3 DESCRIPTION OF SUPPORT UNITS

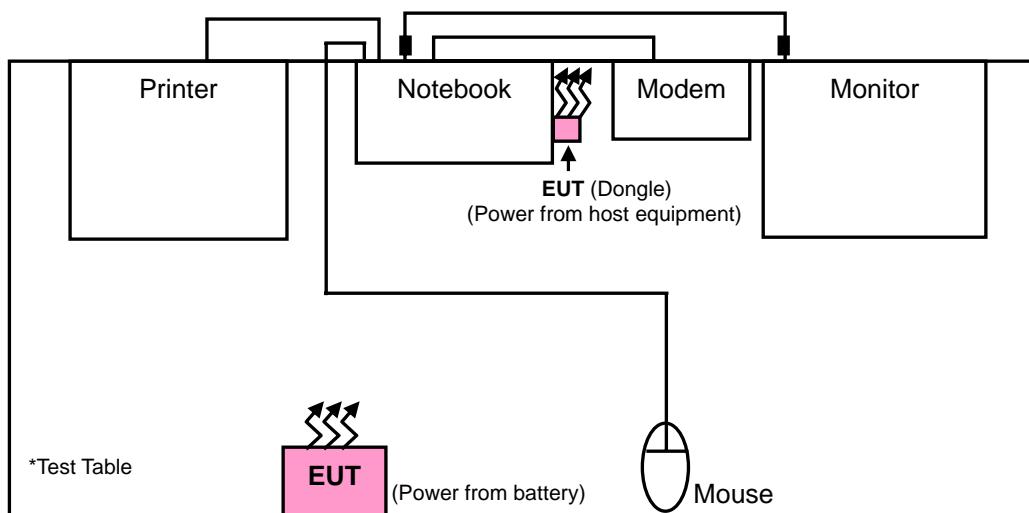
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	D610	DRMTH1S	E2K5HCKT
2	MONITOR	DELL	2408FPb	CN-0G293H-74261 -874-237S-A00	FCC DoC Approved
3	PRINTER	EPSON	LQ-300+	DCGY054146	FCC DoC Approved
4	MODEM	ACEEX	1414V/3	0401008272	IFAXDM1414
5	MOUSE	DELL	MO56U0	516056379	FCC DoC Approved

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.8 m braid shielded wire, VGA connector, with two cores.
3	1.8m braid shielded wire, DB25 connector, w/o core.
4	1.2m braid shielded wire, DB25 & DB9 connector, w/o core.
5	1.8m foil shielded wire, USB Connector, w/o core.

NOTE: All power cords of the above support units are non-shielded (1.8 m).

3.4 CONFIGURATION OF SYSTEM UNDER TEST





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4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15, Subpart B (section: 15.107)

CISPR 22: 1997 (section 5)

ICES-003: 2004 (Class A: section 5.2)

(Class B: section 5.3)

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15-0.5	79	66	66-56	56-46
0.5-5	73	60	56	46
5-30	73	60	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 23, 2009	Nov. 22, 2010
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 31, 2009	Dec. 30, 2010
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Dec. 25, 2009	Dec. 24, 2010
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jul. 08, 2010	Jul. 07, 2011
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jul. 12, 2010	Jul. 11, 2011
Software ADT	ADT_Cond_V7.3.7	NA	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.



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4.1.3 TEST PROCEDURES

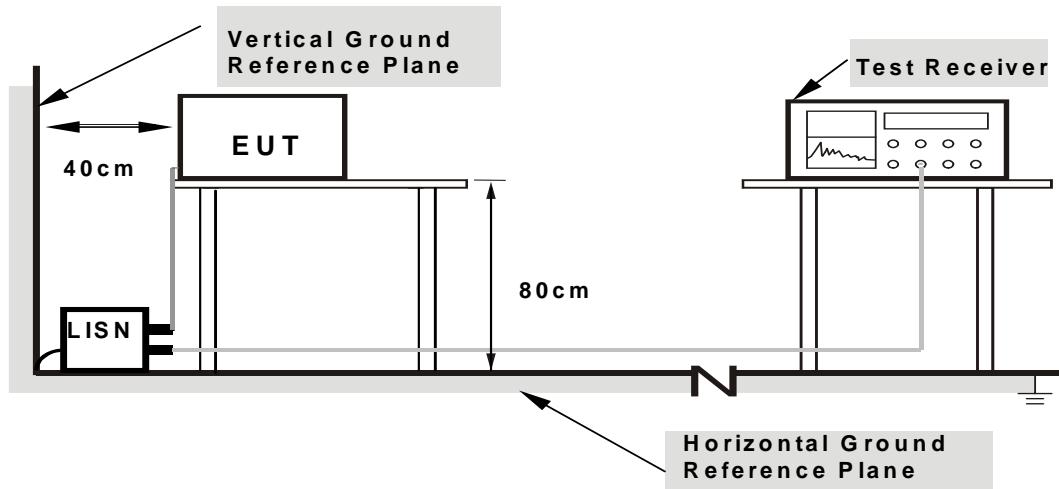
The basic test procedure was in accordance with ANSI C63.4: 2003 (section 7) and CISPR 22 (section 9).

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under Limit - 20dB was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

- a. Plugged the EUT (dongle) to notebook and placed EUT (joystick) on a testing table.
- b. The notebook sent "H" patterns to the monitor, and the monitor displayed them.
- c. The notebook sent "H" patterns to the printer, and the printer printed them.
- d. The notebook sent "H" patterns to the modem.
- e. The EUT (joystick) linked with the EUT (dongle).
- f. Steps b~d were repeated.

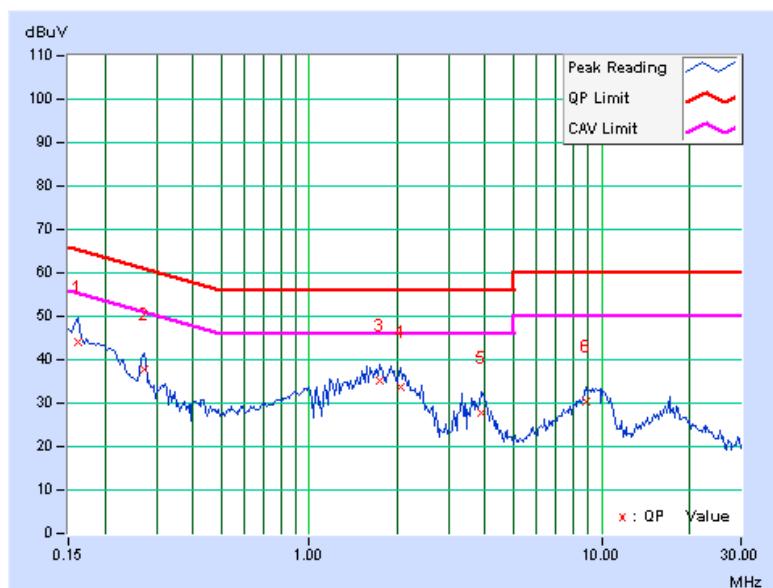
4.1.7 TEST RESULTS

INPUT POWER (SYSTEM)	120 Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64% RH, 985 hPa	PHASE	Line 1
TESTED BY	Peter Lin		

No	Freq. [MHz]	Corr. (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.16	43.86	-	44.02	-	65.38	55.38	-21.36	-
2	0.271	0.17	37.71	-	37.88	-	61.08	51.08	-23.21	-
3	1.742	0.29	34.77	-	35.06	-	56.00	46.00	-20.94	-
4	2.051	0.31	33.54	-	33.85	-	56.00	46.00	-22.15	-
5	3.895	0.35	27.51	-	27.86	-	56.00	46.00	-28.14	-
6	8.851	0.35	29.86	-	30.21	-	60.00	50.00	-29.79	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

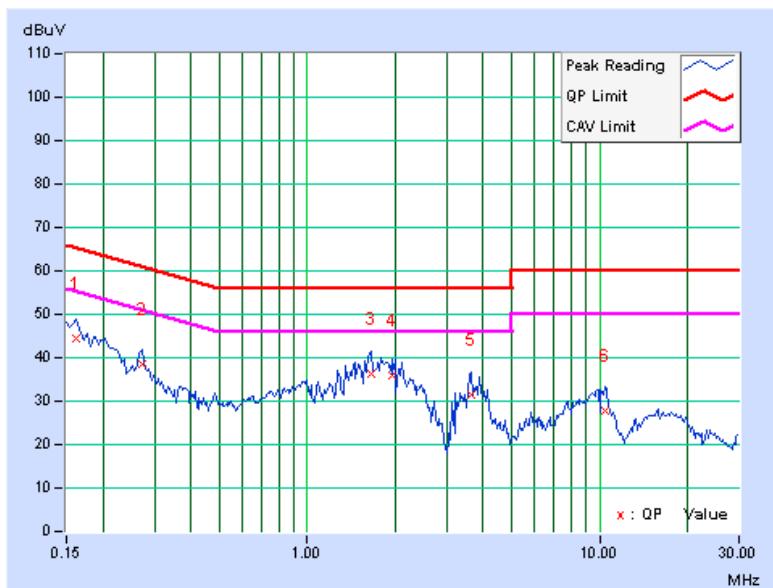


INPUT POWER (SYSTEM)	120 Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64% RH, 985 hPa	PHASE	Line 2
TESTED BY	Peter Lin		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.13	44.41	-	44.54	-	65.38	55.38	-20.84	-
2	0.271	0.14	38.52	-	38.66	-	61.08	51.08	-22.42	-
3	1.656	0.27	36.01	-	36.28	-	56.00	46.00	-19.72	-
4	1.949	0.30	35.45	-	35.75	-	56.00	46.00	-20.25	-
5	3.625	0.35	31.19	-	31.54	-	56.00	46.00	-24.46	-
6	10.461	0.46	27.50	-	27.96	-	60.00	50.00	-32.04	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.





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4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD:

FCC Part 15, Subpart B (section: 15.109)

CISPR 22: 1997 (section 6)

ICES-003: 2004 (Class A: section 5.4)

(Class B: section 5.5)

Frequency (MHz)	Class A (at 10m)		Class B (at 10m)	
	Quasi-peak (dBuV/m)		Quasi-peak (dBuV/m)	
30-230		40		30
230-1000		47		37

NOTE: The limit for radiated test was performed according to CISPR 22:1997, which was specified in FCC PART 15B 15.109(g). Also the limits of CISPR 22:1997 is same.

Frequency (MHz)	Class A (at 3m)		Class B (at 3m)	
	Peak (dBuV/m)	Average (dBuV/m)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	80	60	74	54

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

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	5th harmonic of the highest frequency or 40 GHz, whichever is lower



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4.2.2 TEST INSTRUMENTS FOR FREQUENCY BELOW 1 GHz

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100186	Dec. 11, 2009	Dec. 10, 2010
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	Jul. 22, 2010	Jul. 21, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Dec. 31, 2009	Dec. 30, 2010
BILOG Antenna SCHWARZBECK	VULB9168	9168-148	Apr. 27, 2010	Apr. 26, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-149	Apr. 27, 2010	Apr. 26, 2011
HORN Antenna EMCO	3115	5623	Jul. 13, 2010	Jul. 12, 2011
Preamplifier Agilent	8447D	2944A10636	Dec. 10, 2009	Dec. 09, 2010
Preamplifier Agilent	8447D	2944A10637	Dec. 10, 2009	Dec. 09, 2010
Preamplifier Agilent	8449B	3008A01959	Dec. 10, 2009	Dec. 09, 2010
RF signal cable Woken	8D-FB	Cable-Hych1-01	Nov. 06, 2010	Nov. 05, 2011
RF signal cable Woken	8D-FB	Cable-Hych1-02	Nov. 06, 2010	Nov. 05, 2011
Software ADT	ADT_Radiated_ V 7.7.03.6	NA	NA	NA
Antenna Tower(V)	MFA-440	9707	NA	NA
Antenna Tower(H)	MFA-440	970705	NA	NA
Turn Table	DS430	50303	NA	NA
Controller	MF7802	074	NA	NA
Controller	MF7802	08093	NA	NA
RF signal cable EAST COST Microwave	HP 160S-29	NA	Feb. 12, 2010	Feb. 11, 2011

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 1.
3. The FCC Site Registration No. is 477732.
4. The IC Site Registration No. is IC 7450F-1.
5. The VCCI Site Registration No. is R-1893, G-113.



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FOR FREQUENCY ABOVE 1 GHz

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 21, 2009	Dec. 20, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jan. 11, 2010	Jan. 10, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Apr. 29, 2010	Apr. 28, 2011
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-405	Feb. 03, 2010	Feb. 02, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170147	Jan. 29, 2010	Jan. 28, 2011
Preamplifier Agilent	8447D	2944A10629	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8449B	3008A01959	Dec. 10, 2009	Dec. 09, 2010
RF signal cable HUBER+SUHNER	SUCOFLEX 104	23636/6	Aug. 21, 2010	Aug. 20, 2011
RF signal cable HUBER+SUHNER	SUCOFLEX 104	283402/4	Aug. 21, 2010	Aug. 20, 2011
Software ADT.	ADT_Radiated_V7.6.15.9.2	NA	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA	NA
Turn Table ADT.	TT100.	TT93021702	NA	NA
Controller ADT.	SC100.	SC93021702	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 2.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 686814.
5. The IC Site Registration No. is IC 7450F-2.
6. The VCCI Site Registration No. is G-18.



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4.2.3 TEST PROCEDURES

The basic test procedure was in accordance with ANSI C63.4: 2003 (section 8) and CISPR 22 (section 10).

FREQUENCY RANGE 30MHz ~ 1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-Peak (QP) detection at frequency below 1 GHz.



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FREQUENCY RANGE ABOVE 1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from 1 meter to 4 meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

NOTE:

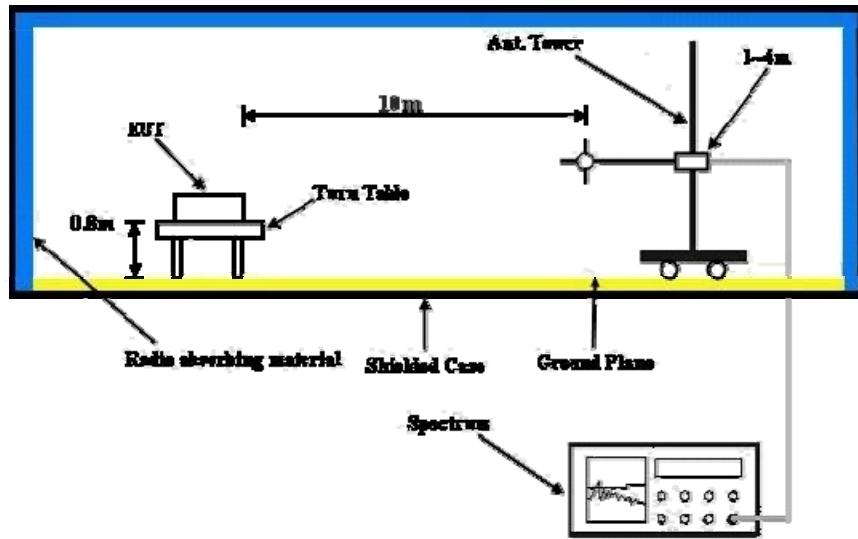
1. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3 MHz for Peak (PK) detection at frequency above 1 GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average (AV) detection at frequency above 1 GHz.
2. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.

4.2.4 DEVIATION FROM TEST STANDARD

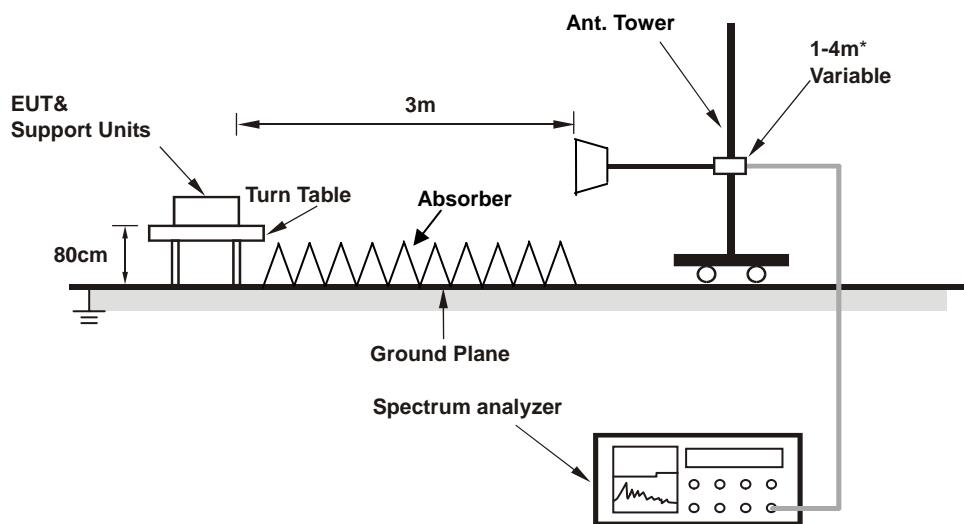
No deviation.

4.2.5 TEST SETUP

FREQUENCY RANGE 30MHz ~ 1GHz



FREQUENCY RANGE ABOVE 1GHz



* : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as item 4.1.6.



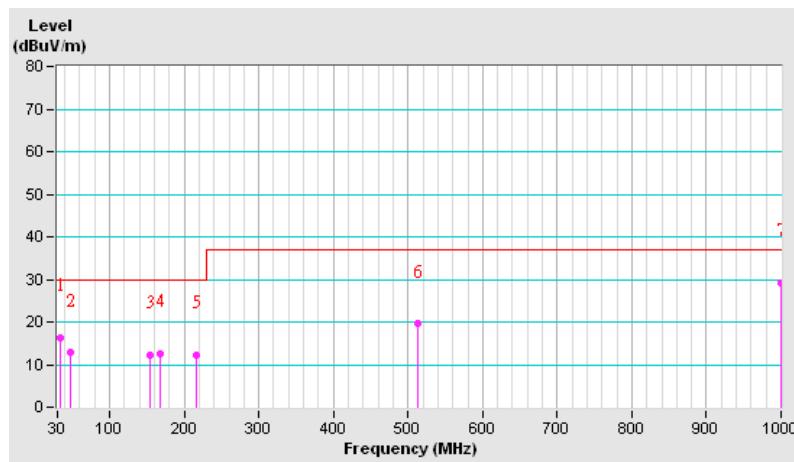
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4.2.7 TEST RESULTS

INPUT POWER (SYSTEM)	120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	21 deg. C, 60% RH, 981 hPa	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Scott Yang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 10 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.89	16.40 QP	30.00	-13.60	3.00 H	15	2.94	13.45
2	47.49	12.77 QP	30.00	-17.23	3.50 H	164	-1.35	14.11
3	154.41	12.33 QP	30.00	-17.67	3.50 H	165	-1.86	14.19
4	168.02	12.57 QP	30.00	-17.43	2.00 H	188	-1.35	13.92
5	216.61	12.31 QP	30.00	-17.69	3.50 H	211	0.17	12.14
6	514.03	19.56 QP	37.00	-17.44	3.50 H	170	-1.64	21.21
7	1000.00	29.11 QP	37.00	-7.89	1.50 H	37	-0.40	29.51

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.





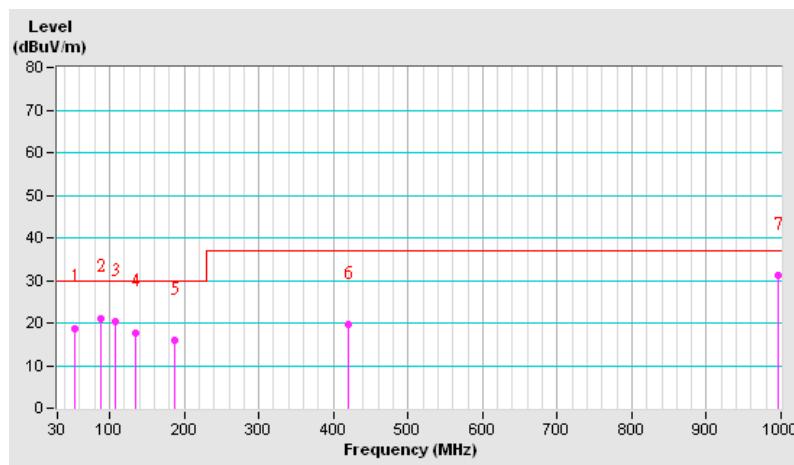
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INPUT POWER (SYSTEM)	120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	21 deg. C, 60% RH, 981 hPa	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Scott Yang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 10 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.33	18.68 QP	30.00	-11.32	2.50 V	3	4.83	13.86
2	88.32	21.12 QP	30.00	-8.88	1.50 V	4	11.04	10.08
3	107.76	20.17 QP	30.00	-9.83	2.00 V	264	8.84	11.34
4	134.97	17.69 QP	30.00	-12.31	2.00 V	341	3.87	13.81
5	187.45	15.80 QP	30.00	-14.20	2.50 V	176	3.11	12.69
6	420.72	19.54 QP	37.00	-17.46	2.00 V	341	-0.03	19.57
7	996.11	31.08 QP	37.00	-5.92	3.50 V	81	0.75	30.33

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.





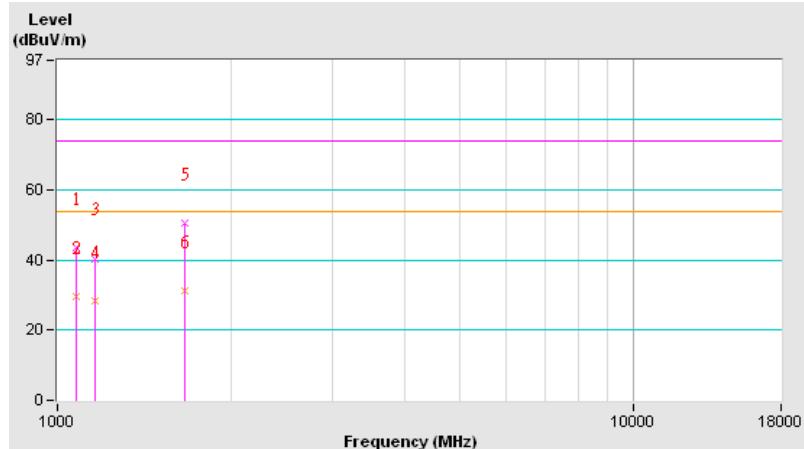
A D T

INPUT POWER (SYSTEM)	120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 987 hPa	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Whisky Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1080.43	43.56 PK	74.00	-30.44	1.00 H	178	15.57	27.99
2	1080.43	29.68 AV	54.00	-24.32	1.00 H	178	1.69	27.99
3	1165.24	40.46 PK	74.00	-33.54	1.37 H	215	12.22	28.24
4	1165.24	28.45 AV	54.00	-25.55	1.37 H	215	0.21	28.24
5	1661.35	50.45 PK	74.00	-23.55	1.24 H	189	20.85	29.60
6	1661.35	31.15 AV	54.00	-22.85	1.24 H	189	1.55	29.60

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.





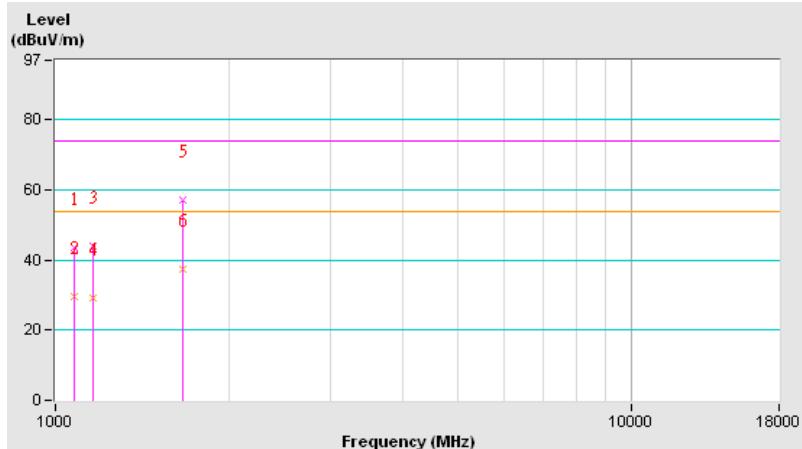
A D T

INPUT POWER (SYSTEM)	120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 987 hPa	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Whisky Chang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1080.38	43.68 PK	74.00	-30.32	1.00 V	181	15.69	27.99
2	1080.38	29.63 AV	54.00	-24.37	1.00 V	181	1.64	27.99
3	1165.23	43.99 PK	74.00	-30.01	1.00 V	210	15.75	28.24
4	1165.23	28.99 AV	54.00	-25.01	1.00 V	210	0.75	28.24
5	1662.46	56.93 PK	74.00	-17.07	1.00 V	186	27.33	29.61
6	1662.46	37.23 AV	54.00	-16.77	1.00 V	186	7.62	29.61

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

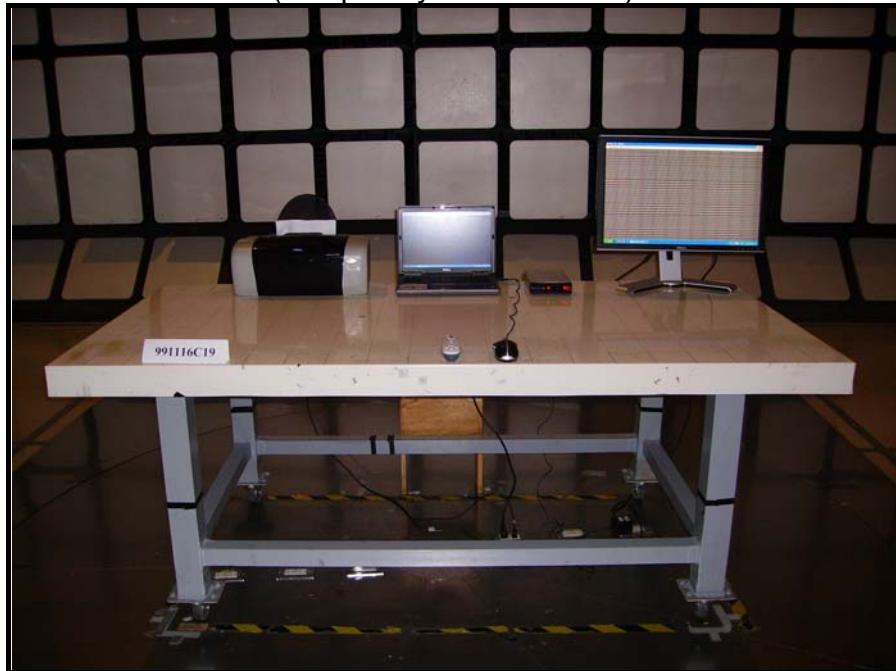


5 PHOTOGRAPHS OF THE TEST CONFIGURATION

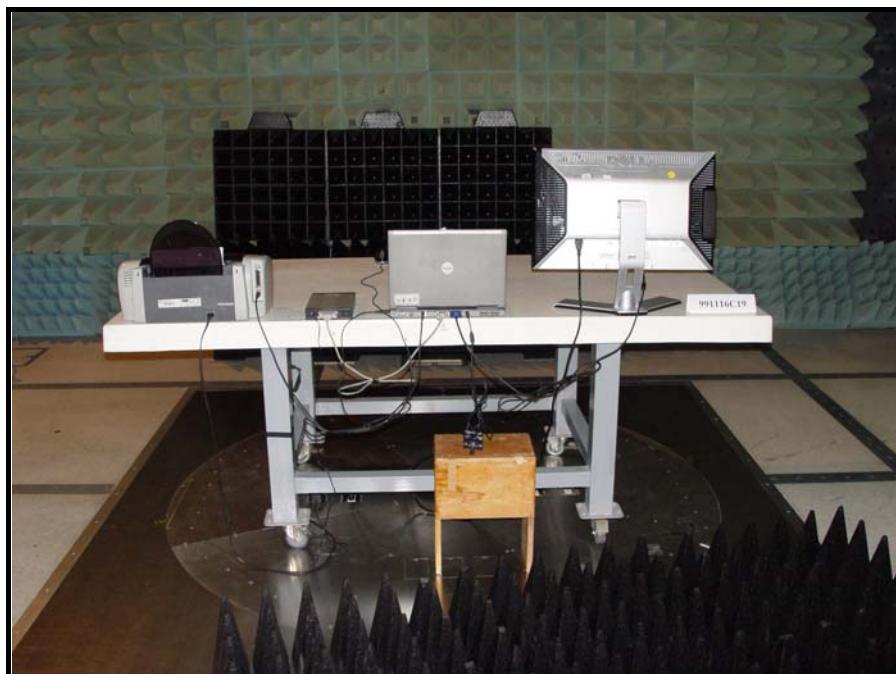
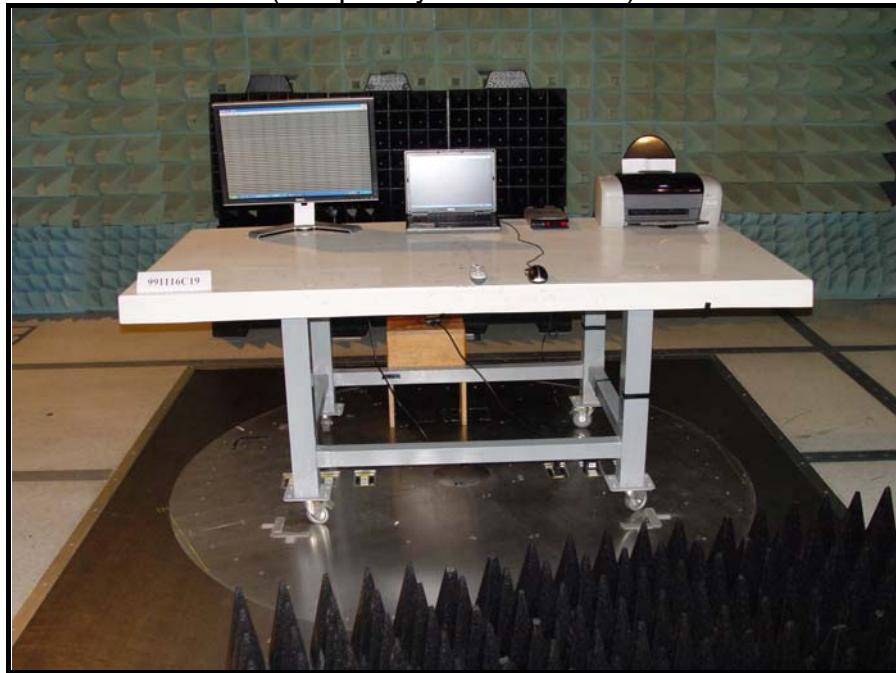
Conducted Emission Test



Radiated Emission Test
(Frequency below 1 GHz)



Radiated Emission Test
(Frequency above 1 GHz)





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6 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab

Tel: 886-3-3183232

Fax: 886-3-3185050

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



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7 APPENDIX A – MODIFICATION RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--- END ---