Date of Issue: September 7, 2004

#### FCC 47 CFR PART 15 SUBPART B

## **TEST REPORT**

#### For

#### **Embedded Control PC**

Model: AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

**Trade Name: AAEON** 

Issued for

AAEON Technology Inc. 5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.

Issued by



# Compliance Certification Services Inc. Hsintien Lab.

No. 165, Chunghsen Road, Hsintien City Taipei Hsien, Taiwan

TEL: (02) 2217-0894 FAX: (02) 2217-1029



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# 1 TEST RESULT CERTIFICATION

**Applicant:** AAEON Technology Inc.

5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien City,

Date of Issue: September 7, 2004

Taipei, Taiwan, R.O.C.

Manufacturer: AAEON Technology Inc.

5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien City,

Taipei, Taiwan, R.O.C.

**Equipment Under Test:** Embedded Control PC

**Trade Name:** AAEON

**Model:** AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

**Deviation:** None

**Detailed EUT** See Item 2 of this report

**Date of Test:** August 18, 2004 & August 31, 2004

Applicable Standard	Class / Limit	Test Result			
FCC Part 15 Subpart B	Class B	No non-compliance noted			
Deviation from Applicable Standard					
None					

The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart B and the measurement procedures were according to ANSI C63.4. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

Approved by:

David Wang

Manager of Hsintien Laboratory

Compliance Certification Services Inc.

Reviewed by:

Vince Chiang

Section Manager of Hsintjen Laboratory

Compliance Certification Services Inc.

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# 2 EUT DESCRIPTION

Product	Embedded Control PC
Trade Name	AAEON
Model	AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)
Housing Type	Metal case
<b>EUT Power Rating</b>	12VDC from AC Adaptor
AC Power During Test	120VAC / 60 Hz to AC Adaptor
AC Adaptor Manufacturer	LE
AC Adaptor Model Number	LE-9702B
Power Adaptor Power Rating	I/P: 100-240VAC, 50/ 60Hz O/P: 12VDC
AC Power Cord Type	Unshielded, 1.8m (Detachable)
DC Power Cable Type	Unshielded, 1.8m (Non-Detachable) to AC Adaptor with a core
EUT I/O Cable Type	KB/MS (one to two): Shielded, 1.8m (Non-Detachable) AUDIO (one to three): Shielded, 1.8m (Non-Detachable)
OSC/Clock Frequency	14.318MHz; 25MHz; 32.768kHz

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## I/O PORT OF EUT

I/O PORT TYPE	Q'TY	TESTED WITH
1). PIO Port	1	1
2). SIO Port	2	2
3). PS/2 Port (one to two adaptor)	1X2	1X2
4). VIDEO-OUT Port (VGA)	1	1
5). AUDIO Port (one to three adaptor)	1X3	1X3
6). LAN Port	1	1
7). USB Port (1.1)	4	4
8). PCMCIA Card Slot	1	N/A
9). CF Card Slot	1	1

Note: Client consigns only one model sample (Model Number is AEC-6820-XX (1st "X" means  $A\sim Z$ , 2nd "X" means  $0\sim 9$ )) to test.

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# 3 TEST METHODOLOGY

# 3.1 EUT System Operation

- 1. Windows XP boots system.
- 2. Run Emctest.exe choice Elements / Video Mode to test.
- 3. Run Emitest.exe choice "O" Run All test.
- 4. Press the start menu, select executive and type ping 192.168.0.10 –t(EUT), ping 192.168.0.1 –t(Server Notebook).

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*Note:* Test program is self-repeating throughout the test.

#### 3.2 DECISION OF FINAL TEST MODE

1. The following test mode were scanned during the preliminary test:

#### **Conduction:**

1	1024X768, VF=70Hz
2	800X600, VF=60Hz

#### **Radiation(s):**

1	1024X768, VF=70Hz
2	800X600, VF=60Hz
3	1024X768, VF=70 / 1-5GHz

2. After the preliminary scan, the following test mode was found to produce the highest emission level.

**Conduction:** Mode 1 **Radiation:** Mode 1

Then, the EUT configuration and cable configuration of the above highest emission mode was recorded for all final test items.

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# 4 SETUP OF EQUIPMENT UNDER TEST

# **Setup Diagram**

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

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#### **Support Equipment**

#### **Host PC Devices:**

No	Equipment	Model #	Serial #	FCC/BSMI ID	Trade Name
1	HDD	ST92011A	3KV05MXM	D33027	Seagate
2	POWER	E102	N/A	N/A	AAEON
3	CPU (1GHz/733MHz)	TM5800	N/A	N/A	Transmeta
4	RAM (128MB)	HY57V561620CT-H 128M	N/A	N/A	Hynix
5	SD RAM (64MB)	N/A	N/A	N/A	SAMSUNG
6	Motherboard	GENE-6330	N/A	N/A	AAEON
7	Card Reader	128MB FLASH CARD	FC128	N/A	PQI

#### **Peripherals Devices:**

No	Equipment	Model	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	USB Mouse	M-BE58	N/A	BSMI ID: 3892A471	M-BE58	Shielded, 1.8m	N/A
2	USB Mouse	M-BE58	N/A	BSMI ID: 3892A471	M-BE58	Shielded, 1.8m	N/A
3	USB Mouse	M-BE58	N/A	BSMI ID: 3892A471	M-BE58	Shielded, 1.8m	N/A
4	USB Mouse	M-BE58	N/A	BSMI ID: 3892A471	M-BE58	Shielded, 1.8m	N/A
5	PS/2 Mouse	M-S34	LNA12301809	BSMI ID: 4862A011 DZL211029	Logitech	Shielded, 1.8m	N/A
6	PS/2 Keyboard	6311-TW4C16	N/A	BSMI ID: 4862A064	ACER	Shielded, 1.8m	N/A
7	Player	RQ-L11LT	N/A	BSMI ID: 3912A162	Panasonic	Unshielded, 1.0m	N/A
8	Ear. / Mic.	N/A	N/A	N/A	N/A	Unshielded, 1.7m	N/A
9	Modem	5JEG4033MKO	N/A	5RJTAI-35500-M5-E	TOP- SOLUTION	Shielded, 1.2m	Unshielded, 1.8m
10	Modem	5JEG4033MKO	N/A	5RJTAI-35500-M5-E	TOP- SOLUTION	Shielded, 1.8m	Unshielded, 1.8m
11	Monitor	171T	GH17H4LT6047BL	R33475	SAMSUNG	Shielded, 1.8m with two cores	Unshielded, 1.8m
12	Printer	C60	N/A	BSMI ID: 3902E006	EPSON	Shielded, 1.8m	Unshielded, 1.8m
13	Server Notebook	M285	RD49R-7YTJR- B3C4K-G2JQX- DD3CG	DoC R31259	LEO	Unshielded, 20m	Unshielded, 1.8m with a core

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test. Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

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#### 5 FACILITIES AND ACCREDITATIONS

### 5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at CCS Taiwan Hsintien Lab at No. 165, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan.

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The measurement facilities are constructed in conformance with the requirements of CISPR 16-1, ANSI C63.4 and other equivalent standards.

#### 5.2 LABORATORY ACCREDITATIONS AND LISTINGS

The test facilities used to perform Electromagnetic compatibility tests are registered or accredited by the organizations listed in the following table which includes the recognized scope specifically.

Country	Agency	Scope of Accreditation	Logo
USA	A2LA	CFR 47, FCC Part 15/18 using ANSI 63.4; AS/NZS 3548; VCCI V3; CNS 13438; CNS 13439; CNS 13783; CNS 14115; CISPR 11/EN 55011; CISPR 14-1/EN 55014-1; CISPR 15/EN 55015; CISPR 22/EN 55022; EN 50081-1/EN 61000-6-3; EN 50082-1/EN 61000-6-4; IEC/EN 61000-4-2, IEC/EN 61000-4-3, IEC/EN 61000-4-6, IEC/EN 61000-4-8, IEC/EN 61000-4-11, IEC/EN 61000-3-2, IEC/EN 61000-3-3; CISPR 24/EN 55024; CISPR 14-2/EN 55014-2; EN 50081-2/EN 61000-6-1; EN 50082-2/EN 61000-6-2.	ACCREDITED 824.01
USA	FCC	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	FC 250366
Japan	VCCI	3/10 meter Open Area Test Sites and Line Conducted Test Room to perform conducted/radiated measurements	VCCI R-1434/1630~4 C-1511/1882
Norway	NEMKO	EN 50081-1/2, EN 50082-1/2, IEC 61000-6-1/2/3/4, EN 50091-2, EN 50130-4, EN 55011, EN 55013, EN 55014-1/2, EN 55015, EN 55022, EN 55024, EN 61000-3-2/3, EN 61326-1, IEC 61000-4-2/3/4/5/6/8/11, Cispr 16-1/2/3/4	ELA 103
Taiwan	CNLA	47 CFR FCC Part 15 Subpart B, EN 61000-3-2, EN 61000-3-3, CNS 13439, CNS 13783-1, CNS 13438, AS/NZS 3548, VCCI, CNS 13022-1/2/3, EN 55022, EN 55013, EN 55014-1, EN 61000-4-2/3/4/5/6/8/11, ENV 50204, ENV 50141, ENV 50142	1108 ILAC MRA
Taiwan	BSMI	CNS 13438, CNS 13783-1, CNS 13439	SL2-IN-E-0005 SL2-A1-E-0005 SL2-R1-E-0005 SL2-R2-E-0005

**Note:** No part of this report may be used to claim or imply product endorsement by CNLA, A2LA or other government agency.

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#### 6 INSTRUMENT AND CALIBRATION

#### 6.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

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# 6.2 test and MEASURement equipment

The following list contains measurement equipment used for testing. The equipment conforms to the requirement of CISPR 16-1, ANSI C63.2 and. other equivalent standards.

Calibration of all test and measurement, including any accessories that may effect such calibration, is checked frequently to ensure the accuracy. Adjustments are made and correction factors are applied in accordance with the instructions contained in the respective manual.

#### **Equipment Used for Emission Measurement**

Open Area Test Site # J						
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE		
SITE NSA	CCS	J Site	N/A	09/26/2004		
MEASURE RECEIVER	SCHAFFNER	SCR3501	330	06/27/2005		
SPECTRUM ANALYZER	ADVANTEST	R3132	120900003	11/04/2004		
ANTENNA	SCHAFFNER	CBL 6112B	2800	09/27/2004		
PRE- AMPLIFIER	SCHAFFNER	CPA9231A	3629	10/10/2004		
CABLE	BELDEN	9913	N-TYPE #J1	10/10/2004		
ATTENUATOR	MCL	UNAT-6	AT06-8	12/10/2004		
THERMO- HYGRO METER	TFA	N/A	NO.3	11/23/2004		
	Abo	ve 1GHz Used				
EMC ANALYZER (100Hz-22GHz)	HP	8566B	2937A06102	07/26/2005		
ANTENNA (1-18GHz)	EMCO	3115	5761	02/02/2005		
AMPLIFIER (1-26.5GHz)	HP	8449B	3008A01266	02/15/2005		
CABLE (1-18GHz)	JYEBAO HUBER+SUHNER	LL142 SUCOFLEX 104	SMA-RS1&2 SMA-RS3	02/15/2005		

**Note:** The measurement uncertainty is less than +/- 3.36dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.

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Conducted Emission Test Site # A							
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE			
TEST RECEIVER	R&S	ESHS20	840455/006	03/07/2005			
LISN (EUT)	SCHWARZBECK	NSLK 8127	8127382	01/05/2005			
LISN	SOLAR	8012-50-R-24-BNC	8305114	02/10/2005			
BNC CABLE	MIYAZAKI	5D-FB	BNC A1	01/30/2005			

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**Note:** The measurement uncertainty is less than +/- 2.83dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.

# 7 LINE CONDUCTED & RADIATED EMISSION TEST

#### **7.1 LIMIT**

#### **Maximum permissible level of Line Conducted Emission**

FREQUENCY	Class A (dBuV)		Class B (dBuV)	
(MHz)	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

*Note:* The lower limit shall apply at the transition frequency.

#### Maximum permissible level of Radiated Emission measured at 10 meter

FREQUENCY	Class A (dBuV/m)	Class B (dBuV/m)
(MHz)	Quasi-peak	Quasi-peak
30 – 230	40	30
230 - 1000	47	37

*Note:* The lower limit shall apply at the transition frequency.

# Maximum permissible level of Radiated Emission measured at 3 meter

FREQUENCY	Class A (	dBuV/m)	Class B (dBuV/m)		
(MHz)	Average	Peak	Average	Peak	
Above 1000	59.3	79.3	53.9	73.9	

*Note:* The lower limit shall apply at the transition frequency.

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#### 7.2 TEST PROCEDURE OF LINE CONDUCTED EMISSION

#### **Procedure of Preliminary Test**

• The EUT was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

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- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test system with EUT received AC power, 120V/60Hz, through a Line Impedance Stabilization Network (LISN), which supplied power source and was grounded to the ground plane.
- All support equipment received power from a second LISN.
- The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a EMI Test Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to the Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Receiver.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.2 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.2 producing the highest emission level.
- The EUT configuration and cable configuration of the above highest emission level were recorded for reference of the final test.

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## **Procedure of Final Test**

• EUT and support equipment were set up on the test bench as per step 10 of the preliminary test.

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- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the AV. limit in Q.P. mode, then the emission signal was re-checked using an AV. detector.
- The test data of the worst-case condition(s) was recorded.

#### **Data Sample:**

Freq. MHz	Read Level dBuV	Factor dB	Level dBuV	Limit dBuV	Over Limit dB	Reading Type (P/Q/A)	Line (L1/L2)
x.xx	42.95	0.55	43.50	56	-12.50	Q	L1

Freq. = Emission frequency in MHz

Read Level = Uncorrected Analyzer/Receiver reading Factor = Insertion loss of LISN + Cable Loss

Level = Read Level + Factor
Limit = Limit stated in standard
Over Limit = Reading in reference to limit

P = Peak Reading

Q = Quasi-peak Reading A = Average Reading

L1 = Hot side L2 = Neutral side

#### **Calculation Formula**

Over Limit (dB) = Level (dBuV) – Limit (dBuV)

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#### 7.3 TEST PROCEDURE OF RADIATED EMISSION

#### **Procedure of Preliminary Test**

• The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

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- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The EUT received AC power source, 120V/60Hz, from the outlet socket under the turntable. All support equipment received power from another socket under the turntable.
- The antenna was placed at 10 meter away from the EUT as stated in ANSI C63.4. The
  antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier
  would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 5000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- The test mode(s) described in Item 3.2 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 3.2 producing the highest emission level.
- The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

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## **Procedure of Final Test**

• EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.

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- The Analyzer / Receiver scanned from 30MHz to 5000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.
- The test data of the worst case condition(s) was recorded.

#### **Data Sample:**

Freq. MHz	Amptd dBuV/m	Margin dB	Limit dBuV/m	Reading dBuV	Factor dB/m	Reading Type (P/Q/A)	Pol. (H/V)
x.xx	26.2	-3.8	30	14	12.2	Q	Н

Freq. = Emission frequency in MHz

Reading = Uncorrected Analyzer/Receiver reading

Factor = Antenna Factor + Cable Loss + Attenuator (3/6/10dB) – Amplifier Gain

Amptd = Uncorrected Analyzer/Receiver reading + Factor

Limit = Limit stated in standard

Margin = Reading in reference to limit

P = Peak Reading

Q = Quasi-peak Reading A = Average Reading

H = Antenna Polarization: Horizontal V = Antenna Polarization: Vertical

#### **Calculation Formula**

Margin (dB) = Amptd (dBuV/m) – Limit (dBuV/m)

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# 7.4 TEST RESULTS

## **Line Conducted Emission**

Model: AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9) Test Mode: Mode 1

**Temperature:** 26 °C **Humidity:** 64% RH

**Test Results:** Passed **Tested by:** John Yen

(The chart below shows the highest readings taken from the final data, see Appendix II for details.)

Six Highest Conducted Emission Readings									
Fre	quency Ran	ge Investiga	ated		150 kHz (	to 30 MHz			
Freq (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV)	Limit Line (dBuV)	Line (L1/L2)				
0.152	40.15	0.11	40.26	65.91	-25.65	P	L1		
2.839	36.51	0.21	36.72	56.00	-19.28	P	L1		
3.799	41.79	0.27	42.06	56.00	-13.94	P	L1		
0.171	39.57	0.11	39.68	64.90	-25.22	P	L2		
2.664	35.15	0.20	35.35	56.00	-20.65	P	L2		
3.779	42.11	0.27	42.38	56.00	-13.62	P	L2		

NOTE: The emission level was or more than 2dB below the Average limit, so no re-check anymore.

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# **Radiated Emission**

Model: AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9) Test Mode: Mode 1

**Temperature:** 24°C **Humidity:** 62% RH

Test Results: Pass Tested by: John Yen

(The chart below shows the highest readings taken from the final data, see Appendix II for details.)

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	Six Highest Radiated Emission Readings									
Frequency	Range Inve	estigated		30	MHz to 100	00 MHz at 1	0m			
Freq (MHz)	Amptd (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Reading Hactor (dBuV) (dB/m) Reading Type (P/Q/A) (H						
124.9960	28.02	-1.98	30.00	37.30	-9.28	Q	V			
125.0030	27.66	-2.34	30.00	36.94	-9.28	Q	Н			
165.3550	28.00	-2.00	30.00	39.20	-11.20	Q	Н			
227.6800	26.89	-3.11	30.00	36.54	-9.65	P	Н			
257.7400	34.84	-2.16	37.00	42.69	-7.85	Q	Н			
261.3800	34.44	-2.56	37.00	42.23	-7.79	Q	H			

NOTE: 30M to 1000M test is Applicable CISPR 22 / EN 55022 standard.

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# APPENDIX I - PHOTOGRAPHS OF TEST SETUP LINE CONDUCTED EMISSION TEST





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# RADIATED EMISSION TEST





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# APPENDIX II - TEST RESULT OF FINAL DATAS

**Conducted Emission Plot** 

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**Radiated Emission Data** 

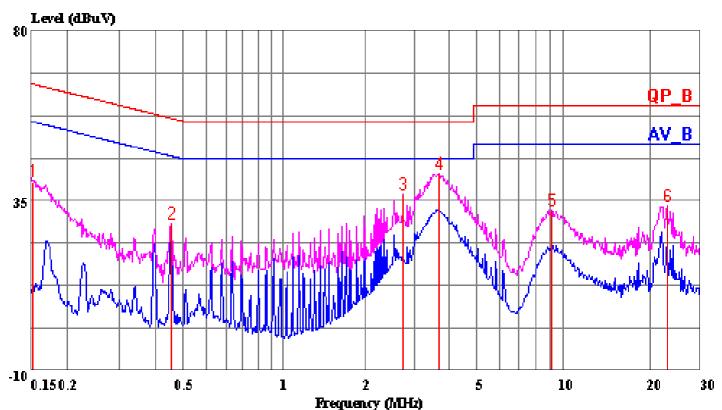
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No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan, R.O.C.

Tel:02-2217-0894 Fax:02-2217-1029

Data#: 6 File#: 40819404C.EMI Date: 2004-08-18 Time: 15:52:06



#### (Conduction A)

Trace: 5 4 Ref Trace:

Condition: LINE

Report No. : 40819404 Test Engr. : JOHN YEN

Company

: AAEON Technology Inc. : AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9) EUT

Test Config : EUT / ALL PERIPHERALS

Type of Test: FCC CLASS B

Mode of Op. : 1024X768, VF=70Hz(WORST)

Page: 1	L
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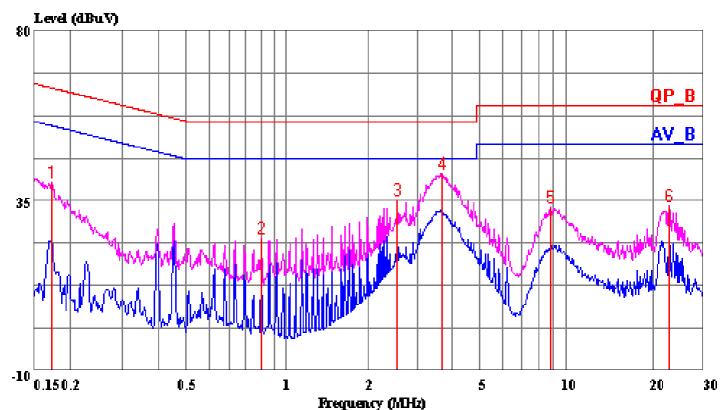
		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dВ	dBuV	dBuV	dВ	
1	0.152	40.15	0.11	40.26	65.91	-25.65	Peak
2	0.454	28.79	0.12	28.91	56.80	-27.89	Peak
3	2.839	36.51	0.21	36.72	56.00	-19.28	Peak
4	3.799	41.79	0.27	42.06	56.00	-13.94	Peak
5	9.204	32.11	0.49	32.60	60.00	-27.40	Peak
6	23.018	32.50	1.01	33.50	60.00	-26.50	Peak



No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan, R.O.C.

Tel:02-2217-0894 Fax:02-2217-1029

Data#: 9 File#: 40819404C.EMI Date: 2004-08-18 Time: 15:56:31



#### (Conduction A)

Ref Trace: Trace: 8 7

Condition: NEUTRAL Report No. : 40819404 Test Engr. : JOHN YEN

Company

: AAEON Technology Inc. : AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

Test Config : EUT / ALL PERIPHERALS

Type of Test: FCC CLASS B

Mode of Op. : 1024X768, VF=70Hz(WORST)

			Page:	1
Read	Limit	Over		

		recaa			TITILE C	OVCI	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.171	39.57	0.11	39.68	64.90	-25.22	Peak
2	0.909	25.11	0.15	25.26	56.00	-30.74	Peak
3	2.664	35.15	0.20	35.35	56.00	-20.65	Peak
4	3.779	42.11	0.27	42.38	56.00	-13.62	Peak
5	8.869	32.89	0.48	33.37	60.00	-26.63	Peak
6	22.896	32.64	1.00	33.64	60.00	-26.36	Peak



Site J

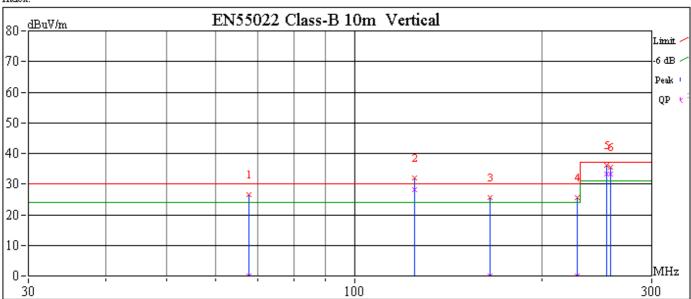
Custom Name: AAEON Technology Inc.

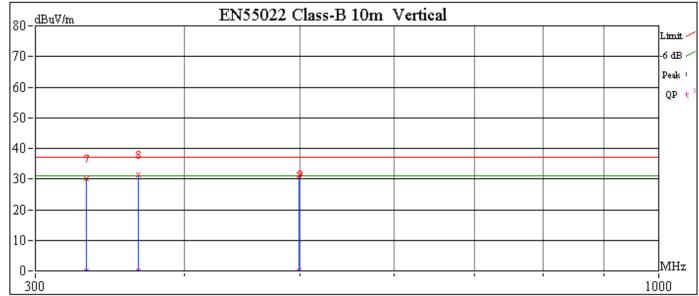
Model Name: AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

Engineer Name: John Yen

Test Mode:1024X768, VF=70Hz (WORST)

#### Index:





	Freq(MHz)	Peak(dBuV/m)	QP(dBuV/m)	Margin(dB)	Limit(dBuV/m)	Reading(dBuV)	Factor(dB)	Height	Degree	Comment
1	67.7600	26.41		-3.59	30.00	42.54	-16.13	100	111	
2	124.9960	32.15	28.02	-1.98	30.00	37.30	-9.28	100	298	
3	165.3730	25.45		-4.55	30.00	36.65	-11.20	100	298	
4	227.7300	25.68		-4.32	30.00	35.32	-9.64	100	298	
5	254.0900	36.06	33.24	-3.76	37.00	41.16	-7.92	100	0	
6	257.7300	35.38	33.21	-3.79	37.00	41.06	-7.85	100	83	
7	330.7500	30.15		-6.85	37.00	36.59	-6.44	100	204	
8	365.8400	31.39		-5.61	37.00	36.98	-5.59	100	298	
9	498.8400	31.21		-5.79	37.00	32.68	-1.47	399	98	



Site J

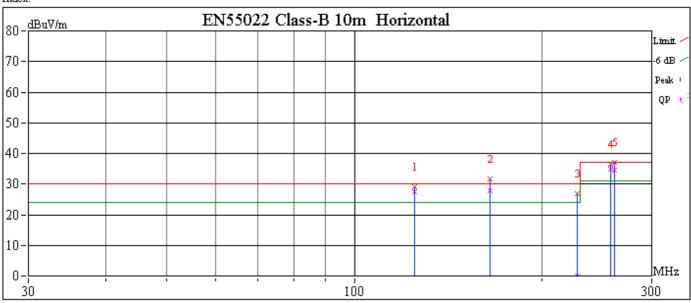
Custom Name: AAEON Technology Inc.

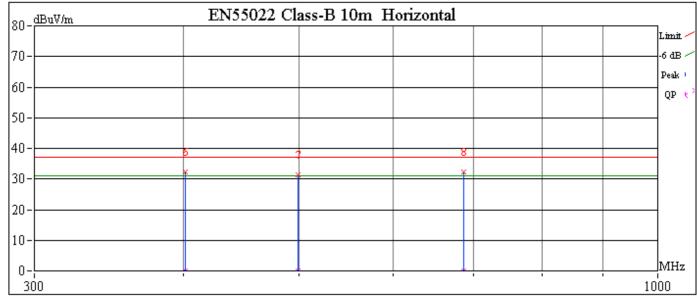
Model Name: AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

Engineer Name: John Yen

Test Mode:1024X768, VF=70Hz (WORST)

#### Index:





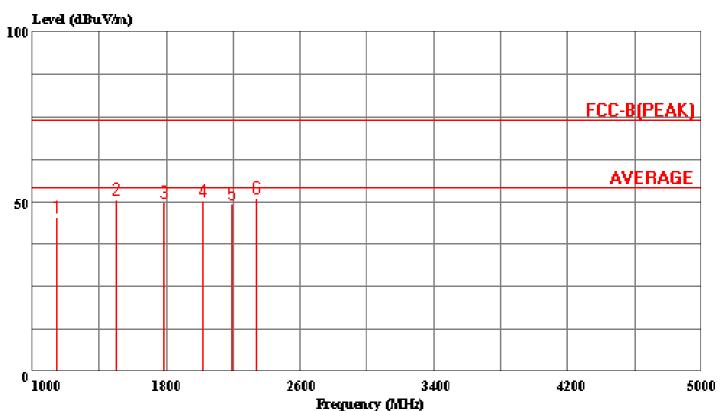
	Freq(MHz)	Peak(dBuV/m)	QP(dBuV/m)	Margin(dB)	Limit(dBuV/m)	Reading(dBuV)	Factor(dB)	Height	Degree	Comment
1	125.0030	29.04	27.66	-2.34	30.00	36.94	-9.28	399	298	
2	165.3550	31.61	28.00	-2.00	30.00	39.20	-11.20	399	205	
3	227.6800	26.89		-3.11	30.00	36.54	-9.65	399	60	
4	257.7400	36.38	34.84	-2.16	37.00	42.69	-7.85	399	115	
5	261.3800	37.20	34.44	-2.56	37.00	42.23	-7.79	399	0	
6	401.6100	32.42		-4.58	37.00	36.99	-4.57	100	0	
7	498.8700	31.22		-5.78	37.00	32.69	-1.47	100	0	
8	687.2900	32.44		-4.56	37.00	31.23	1.21	100	185	
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No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan, R.O.C.

Tel:02-2217-0894 Fax:02-2217-1029

Data#: 8 File#: 40819404B.EMI Date: 2004-08-18 Time: 16:53:30



#### (Chamber RS)

Trace: Ref Trace:

Condition: VERTICAL /3m Report No. : 40819404 Test Engr. : JOHN YEN

Company : AAEON Technology Inc.

EUT : AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

Test Config : EUT / ALL PERIPHERALS

Type of Test: FCC CLASS B

Mode of Op. : 1024X768, VF=70Hz/1-5GHz

: All Test Data Under the Average Limit

Page: 1

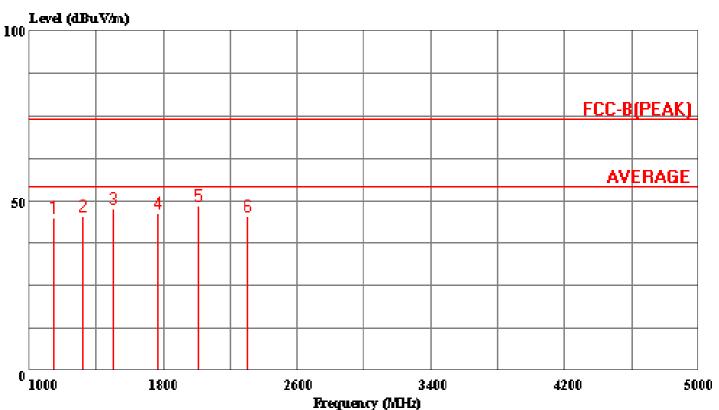
	Frea	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	1104		1 00001				11011101211
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	1148.500	54.70	-9.41	45.29	74.00	-28.71	Peak
2	1504.000	58.40	-7.86	50.54	74.00	-23.46	Peak
3	1787.500	55.70	-6.05	49.65	74.00	-24.35	Peak
4	2017.000	54.70	-4.60	50.10	74.00	-23.90	Peak
5	2194.000	52.90	-3.66	49.24	74.00	-24.76	Peak
6	2335.000	53.90	-2.91	50.99	74.00	-23.01	Peak



No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan, R.O.C.

Tel:02-2217-0894 Fax:02-2217-1029

Data#: 11 File#: 40819404B.EMI Date: 2004-08-18 Time: 16:54:04



## (Chamber RS)

Trace: Ref Trace:

Condition: HORIZONTAL /3m Report No. : 40819404 Test Engr. : JOHN YEN

Company : AAEON Technology Inc.

EUT : AEC-6820-XX (1st "X" means A~Z, 2nd "X" means 0~9)

Test Config : EUT/ ALL PERIPHERALS

Type of Test: FCC CLASS B

Mode of Op. : 1024X768, VF=70Hz/1-5GHz

: All Test Data Under the Average Limit

Page: 1
Read Limit Over

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	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	———— dBuV		dBuV/m		dB	
	11112	abav	QD	abav, iii	abav, iii	QD	
1	1147.000	54.50	-9.41	45.09	74.00	-28.91	Peak
2	1318.000	54.00	-8.69	45.31	74.00	-28.69	Peak
3	1499.500	55.30	-7.89	47.41	74.00	-26.59	Peak
4	1768.000	52.70	-6.17	46.53	74.00	-27.47	Peak
5	2012.500	52.90	-4.63	48.27	74.00	-25.73	Peak
6	2300.500	48.60	-3.09	45.51	74.00	-28.49	Peak