

FCC 47 CFR PART 15 SUBPART B

TEST REPORT

For

APCI Half-Size SBC

Model: HSB-810A

Trade Name: AAEON

Issued to

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, 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:	APCI Half-Size SBC
Trade Name:	AAEON
Model:	HSB-810A
Detailed EUT Description:	See Item 2 of this report
Date of Test:	December 29, 2004

Applicable Standard	Class / Limit	Test Result			
FCC Part 15 Subpart B	Class A	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:

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Vince Chiang Section Manager of Hsintien Laboratory Compliance Certification Services Inc.



2 EUT DESCRIPTION

Product	APCI Half-Size SBC
Trade Name	AAEON
Model	HSB-810A
Housing Type	Metal case
EUT Power Rating	110VAC~230VAC
AC Power During Test	120VAC / 60 Hz
Power Supply Manufacturer	Enhance
Power Supply Model Number	ENH-0620
AC Power Cord Type	Unshielded, 1.8m (Detachable)
OSC/Clock Frequencies	32.768kHz; 12MHz; 14.318MHz; 25MHz; 33MHz; 48MHz; 66MHz; 100MHz; 133MHz

I/O PORT OF EUT

I/O PORT TYPE	Q'TY	TESTED WITH
1). VIDEO-OUT Port (VGA)	1	1
2). LAN Port	1	1
3). USB Port	7	7
4). PS/2 one to two adaptor	1	1
5). AUDIO IN Port	1	1
6). MICROPHONE Port	1	1
7). EARPHONE Port	1	1

Note: Client consigns only one model sample (Model Number is HSB-810A) to test.



3 TEST METHODOLOGY

3.1 EUT System Operation

- 1. Windows 2000 boots system.
- 2. Run Emctest.exe to activate all peripherals and display "H" pattern on the screen.
- 3. Run Media player.exe to play music.
- 4. Run Winemc.exe then select (E:/ & F:/ & G:/ & H:/ & I:/)" to test USB 2.0 HDD.
- 5. Press the start menu, select executive and type ping 192.168.0.10 -t (Server Notebook), ping 192.168.0.2 -t (EUT).

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 Mode(s):

1.	1280X1024, VF=75Hz
2.	1024X768, VF=60Hz
3.	800X600, VF=72Hz

Radiation Mode(s):

1.	1280X1024, VF=75Hz
1.	1280X1024, VF=75Hz / 1-6.5GHz
2.	1024X768, VF=60Hz
3.	800X600, VF=72Hz

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.



4 SETUP OF EQUIPMENT UNDER TEST

Setup Diagram

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

Support Equipment

EUT Devices:

No	Equipment	Model #	Serial #	FCC ID/ BSMI ID	Trade Name
1.	Backplan	BP-204SA-P2 Rev: A1.0	N/A	N/A	Aaeon
2.	USB&Audio	PER-YC02	N/A	N/A	Aaeon
3.	Power supply	ENH-0620	N/A	N/A	Enhance
4.	HDD	3.5" Serial Fireball3	N/A	N/A	Maxtor
5.	CD-ROM	CD-2800D	N/A	N/A	NEC
6.	CPU (1.3G)	Celeron-M	N/A	N/A	Intel
7.	RAM DDR400 (256MB)	DD2508AMTA	N/A	N/A	ELPIDA
8.	Motherboard	HSB-810A	N/A	N/A	AAEON



Peripherals Devices:

No	Equipment	Model	Serial No.	FCC ID / BSMI ID	Trade Name	Data Cable	Power Cord
1.	USB Mouse	M-BE58	HCA43200554	DoC BSMI: T41126	Logitech	Shielded, 1.8m	N/A
2.	USB Mouse	M-BE58	HCA432000936	DoC BSMI: T41126	Logitech	Shielded, 1.8m	N/A
3.	PS/2 Mouse	M071KC	443029525	DoC BSMI: R41108	DELL	Shielded, 1.8m	N/A
4.	PS/2 Keyboard	SK-8110	N/A	DoC BSMI: T3A002	DELL	Shielded, 1.8m	N/A
5.	Ear. & Mic.	MSB301	N/A	N/A	e-Sense	Unshielded, 1.8m	N/A
6.	Player	RQ-L11LT	N/A	BSMI ID: 3912A162	Panasonic	Unshielded, 1.8m	N/A
7.	USB 2.0 HDD	F12-UF	N/A	BSMI ID: 4912A002	TeraSyS	Shielded, 1.8m	N/A
8.	USB 2.0 HDD	F12-UF	N/A	BSMI ID: 4912A002	TeraSyS	Shielded, 1.8m	N/A
9.	USB 2.0 HDD	F12-U	N/A	BSMI ID: 4912A002	TeraSyS	Shielded, 1.8m	N/A
10.	USB 2.0 HDD	F12-U	N/A	BSMI ID: 4912A002	TeraSyS	Shielded, 1.8m	N/A
11.	USB 2.0 HDD	F12-UF	N/A	BSMI ID: 4912A002	TeraSyS	Shielded, 1.8m	N/A
12.	Monitor	710V	GS17H9NXA058 55D	DoC BSMI: R33475	SAMSUNG	Shielded, 1.8m with two cores	Unshielded, 1.8m
13.	Server Notebook	M285	RD49R-7YTJR- B3C4K-G2JQX- DD3CG	DoC BSMI: R31259	LEO	Unshielded, 10m	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.



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.

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 61000-4-4, IEC/EN 61000-4-5, 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.



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.

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.

Open Area Test Site # K						
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE		
SITE NSA	CCS	K Site	N/A	09/04/2005		
MEASURE RECEIVER	R&S	ESVS30	828488/004	09/24/2005		
SPECTRUM ANALYZER	ADVANTEST	R3132	120900029	No Calibration Required		
ANTENNA	SCHAFFNER	CBL 6112B	2846	05/29/2005		
PRE- AMPLIFIER	SCHAFFNER	CPA9231A	3639	10/08/2005		
CABLE	SUHNER	RG 214	N-TYPE#D2	12/03/2005		
THERMO- HYGRO METER	TFA	N/A	NO.4	03/01/2005		
	Abo	ove 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		

Equipment Used for Emission Measurement

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



Conducted Emission Test Site # B						
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE		
TEST RECEIVER	R&S	ESHS10	843743/015	04/07/2005		
LISN (EUT)	EMCO	3825/2	9106-1810	01/27/2005		
LISN	EMCO	3825/2	1382	02/23/2005		
BNC CABLE	MIYAZAKI	5D-FB	BNC B1	07/18/2005		
Pulse Limiter	R&S	ESH3-Z2	100374	08/26/2005		
THERMO- HYGRO METER	ТОР	HA-202	9303-3	03/24/2005		

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.



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.
- 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.



Procedure of Final Test

- EUT and support equipment were set up on the test bench as per step 10 of the preliminary test.
- 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	evel		Limit dBuV	Over Limit dB	Reading Type (P/Q/A)	Line (L1/L2)	
X.XX	42.95	0.55	43.50	73	-29.50	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
Р	= Peak Reading
Q	= Quasi-peak Reading
А	= Average Reading
L1	= Hot side
L2	= Neutral side

Calculation Formula

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



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.
- 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 6500MHz. 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.



Procedure of Final Test

- EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 6500MHz. 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	ıV/m dB dBuV/m dBu		Reading dBuV	Factor dB/m	Reading Type (P/Q/A)	Pol. (H/V)
X.XX	26.2	-13.8	40	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
Р	= Peak Reading
Q	= Quasi-peak Reading
А	= Average Reading
Н	= Antenna Polarization: Horizontal
V	= Antenna Polarization: Vertical

Calculation Formula

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



7.4 TEST RESULTS

Line Conducted Emission

Model: HSB-810A

Temperature: 17°C

Test Results: Passed

Test Mode: Mode 1 Humidity: 60% RH Tested by: James Chen

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

	Six Highest Conducted Emission Readings														
Frequency	Range Inve	estigated		150 kHz to 30 MHz											
Freq (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Reading Type (P/Q/A)	Line (L1/L2)								
0.923	39.96	9.99	49.95	73.00	-23.05	Р	L1								
6.769	46.00	10.12	56.12	73.00	-16.88	Р	L1								
7.368	47.02	10.13	57.15	73.00	-15.85	Р	L1								
6.024	43.14	10.11	53.25	73.00	-19.75	Р	L2								
6.878	47.62	10.12	57.74	73.00	-15.26	Р	L2								
7.368	48.70	10.13	58.83	73.00	-14.17	Р	L2								

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



Radiated Emission

Model: HSB-810A

Temperature: 18°C

Test Results: Pass

Test Mode: Mode 1 Humidity: 62% RH Tested by: James Chen

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

		Six Highe	st Radiated	Emission R	eadings				
Frequency l	Range Inves	tigated	30 MHz to 1000 MHz at 10m						
Freq (MHz)	Amptd (dBuV/m	Margin (dB)	Limit (dBuV/m)	Reading (dBuV)	Factor (dB/m)	Reading Type (P/Q/A)	Pol. (H/V)		
380.9900	43.12	-3.88	47.00	49.85	-6.73	Р	V		
430.1300	42.94	-4.06	47.00	48.30	-5.36	Q	V		
356.4200	45.35	-1.65	47.00	53.00	-7.65	Q	Н		
430.1500	44.54	-2.46	47.00	49.90	-5.36	Q	Н		
700.5100	45.74	-1.26	47.00	46.10	-0.36	Q	Н		
725.0900	44.55	-2.45	47.00	44.50	0.05	Q	Н		

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



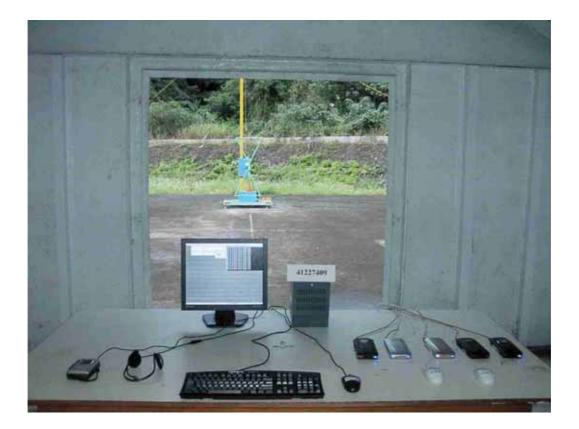
APPENDIX I - PHOTOGRAPHS OF TEST SETUP

LINE CONDUCTED EMISSION TEST





RADIATED EMISSION TEST







APPENDIX II - TEST RESULT OF FINAL DATAS

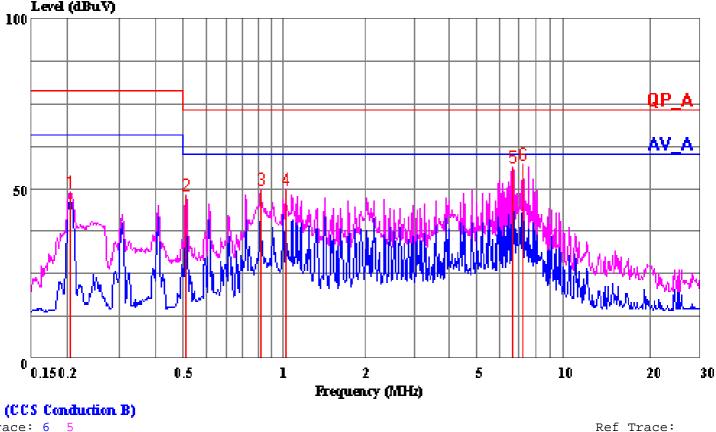
Conducted Emission Plot

Radiated Emission Data



Data#: 7 File#: 41227409CB.EMI

Date: 2004-12-29 Time: 14:14:22



Trace: 6 5

Condition: LINE Report No. : 41227409 Test Engr. : JAMES CHEN

Company : AAEON Technology Inc. EUT: HSB-810A Test Config : EUT / ALL PERIPHERALS Type of Test: FCC CLASS A Mode of Op. : 1280X1024, VF=75Hz / WORST

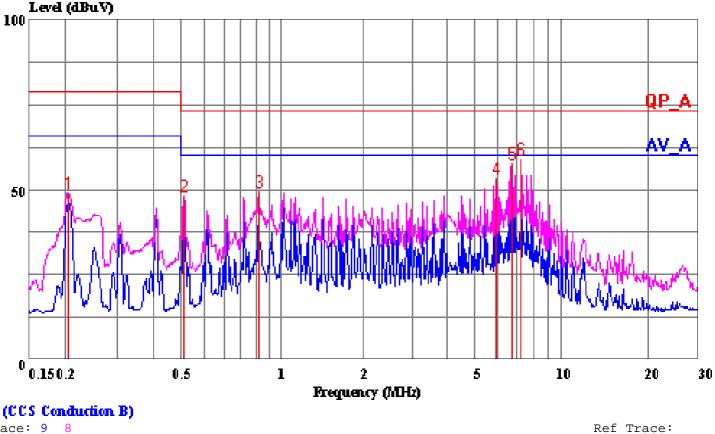
Read Limit Over Line Limit Remark Freq Level Factor Level dBuV dB dBuV dBuV dB MHz 0.204 39.00 9.97 48.97 79.00 -30.03 Peak 1 2 0.510 38.04 9.98 48.02 73.00 -24.98 Peak 3 0.923 39.96 9.99 49.95 73.00 -23.05 Peak 39.92 9.99 4 1.123 49.91 73.00 -23.09 Peak 5 6.769 46.00 10.12 56.12 73.00 -16.88 Peak 6 7.368 47.02 10.13 57.15 73.00 -15.85 Peak

Page: 1



Data#: 10 File#: 41227409CB.EMI

Date: 2004-12-29 Time: 14:23:11



Trace: 9 8

Condition: NEUTRAL Report No. : 41227409 Test Engr. : JAMES CHEN Company : AAEON Technology Inc. EUT : HSB-810A Test Config : EUT / ALL PERIPHERALS Type of Test: FCC CLASS A Mode of Op. : 1280X1024, VF=75Hz / WORST

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1 2 3 4 5 6	0.204 0.510 0.923 6.024 6.878 7.368	39.06 38.24 39.16 43.14 47.62 48.70	9.97 9.98 9.99 10.11 10.12 10.13	49.03 48.22 49.15 53.25 57.74 58.83	73.00 73.00 73.00 73.00	-29.97 -24.78 -23.85 -19.75 -15.26 -14.17	Peak Peak Peak Peak

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COMPLIANCE Engineering Services INC.

Custom Name: AAEON Technology Inc. Model Name: HSB-810A Test Mode: 1280X1024, VF=75Hz / WORST Project No.: 41227409 Engineer Name: JAMES CHEN Date:2004-12-29

dex:														
0- <u>dBu</u>	V/m			EN	55022 C	lass-A 10	m	Vertical						
														Limit
□-														
)-														Peak
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)_ <u>dBu</u>	V/m			EN	55022 C	lass-A 10	m	Vertical	,					_
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)-														Peak QP
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	Freq(MHz)	Peak(dBu	V/m)	QP(dBuV/m) Margin(dB)	Limit(dBuV/n	ı) Rea	ading(dBuV)	Factor	r(dB)	Height	Degree	Commen	t
1			20.82					54.60		0.82				
2			-7.65					50.40		7.65			 	
3			3.12		-3.88			49.85		6.73		0	 	
4			39.51		-7.49			45.41		5.90		0		
5	430.1300		-5.36	42.9	4 -4.06	47.0	0	48.30	-	5.36	100	0		
6	675.9500	4	1.95		-5.05	47.0	0	42.66	-	0.71	100	0		
7	700.5300		-0.36	42.8	4 -4.16	47.0	0	43.20	-	0.36	100	0	 	
8	725.1000	4	10.65		-6.35	47.0	0	40.60		0.05	100	0		
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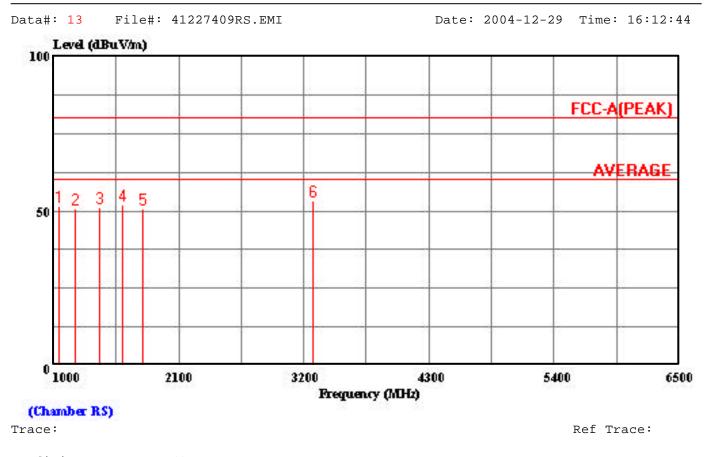
Custom Name: AAEON Technology Inc. Model Name: HSB-810A Test Mode: 1280X1024, VF=75Hz / WORST Project No.: 41227409 Engineer Name: JAMES CHEN Date:2004-12-29

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80-d	BuV/	m				E	N55	022 0	C1a	iss-A	10n	n H	[orizo	nta	al							1
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	F	req(MF	Iz)	Peak(dBu	1V/m)	QP(dB	1V/m)	Margin()	łB)	Limit((dBuV/r	n) Re	ading(dB	uV)	Facto	(dB)	Height	Degree	2	Comm	ent	
	1	70.36			32.67				.33		40.0			3.44		0.77			-			
		282.68 331.82			40.93 38.23				.07		47.0			30 5.83		0.37 8.60						
		356.42			-7.65		45.35		.65		47.0).85).00		7.65						
		380.99			-6.73		42.57		.43		47.0			9.30		6.73		0				
		405.56			41.40				.60		47.0			7.30		5.90		0				
	7	430.15			-5.36 -0.36		44.54 45.74		.46 .26		47.0			9.90 5.10		5.36 0.36						
	8	700.51			0.36		45.74		.26 .45		47.0			 		0.36						
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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



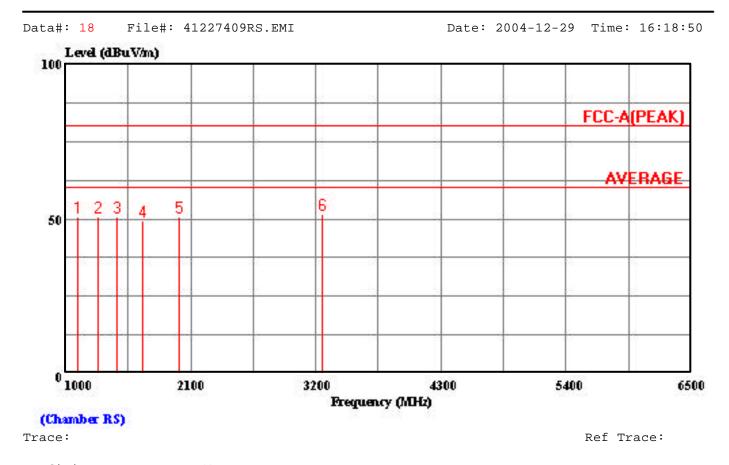
Condition: VERTICAL /3M Report No. : 41227409 Test Engr. : JAMES CHEN Company : AAEON Technology Inc. EUT : HSB-810A Test Config : EUT / ALL PERIPHERALS Type of Test: FCC CLASS A Mode of Op. : 1280X1024, VF=75Hz / 1-6.5GHz : All test data under the avergae limit

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	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1 2 3 4 5 6	1046.500 1189.000 1403.500 1607.500 1784.500 3284.000	61.20 59.80 59.50 59.30 56.70 51.80	-9.84 -9.24 -8.32 -7.20 -6.06 1.50	51.36 50.56 51.18 52.10 50.64 53.30	80.00 80.00 80.00 80.00	-28.64 -29.44 -28.82 -27.90 -29.36 -26.70	Peak Peak Peak Peak



No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan, R.O.C. Tel:02-2217-0894 Fax:02-2217-1029



Condition: HORIZONTAL /3M Report No. : 41227409 Test Engr. : JAMES CHEN Company : AAEON Technology Inc. EUT : HSB-810A Test Config : EUT / ALL PERIPHERALS Type of Test: FCC CLASS A Mode of Op. : 1280X1024, VF=75Hz / 1-6.5GHz : All test data under the avergae limit

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	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	1104	Lever	raccor	Lever	Line	Dimito	nemain
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	1109.500	60.20	-9.57	50.63	80.00	-29.37	Peak
2	1286.500	59.60	-8.82	50.78	80.00	-29.22	Peak
3	1456.000	58.90	-8.10	50.80	80.00	-29.20	Peak
4	1672.000	56.30	-6.78	49.52	80.00	-30.48	Peak
5	2003.500	55.30	-4.67	50.63	80.00	-29.37	Peak
6	3260.000	50.30	1.40	51.70	80.00	-28.30	Peak