

### FCC 47 CFR PART 15 SUBPART B

## **TEST REPORT**

For

SubCompact Board

Model: GENE-8310

**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



**Note:** This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. Ltd. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document.



# **TABLE OF CONTENTS**

1. TE	EST RESULT CERTIFICATION	3
2. EU	UT DESCRIPTION	4
3. TE	EST METHODOLOGY	5
3.1 3.2	EUT SYSTEM OPERATION DECISION OF FINAL TEST MODE	5 5
4. SE	TUP OF EQUIPMENT UNDER TEST	6
5. FA	<b>ACILITIES AND ACCREDITATIONS</b>	7
5.1 5.2	FACILITIES LABORATORY ACCREDITATIONS AND LISTINGS	
6. IN	STRUMENT AND CALIBRATION	8
6.1 6.2	MEASURING INSTRUMENT CALIBRATION TEST AND MEASUREMENT EQUIPMENT	
7. LI	NE CONDUCTED & RADIATED EMISSION TEST	9
7.1 7.2	LIMIT TEST PROCEDURE OF LINE CONDUCTED EMISSION	
7.3 7.4	TEST PROCEDURE OF RADIATED EMISSION TEST RESULTS	
APPI	ENDIX I - PHOTOGRAPHS OF TEST SETUP	16
APPI	ENDIX II - TEST RESULT OF FINAL DATAS	18



## 1. TEST RESULT CERTIFICATION

Applicant:	<b>AAEON Technology Inc.</b> 5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.
Manufacturer:	<b>AAEON Technology Inc.</b> 5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.
Equipment Under Test:	SubCompact Board
Trade Name:	AAEON
Model:	GENE-8310
<b>Detailed EUT Description:</b>	See Item 2 of this report
Date of Test:	April 01, 2005 & April 04, 2005

Applicable Standard	Class / Limit	Test Result				
FCC Part 15 Subpart B Class A No non-compliance note		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:

Reviewed by:

David Wang Manager of Hsintien Laboratory Compliance Certification Services Inc.

ano

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



## 2. EUT DESCRIPTION

Product	SubCompact Board
Trade Name	AAEON
Model	GENE-8310
Housing Type	N/A
EUT Power Rating	12VDC from Host PC Power Adaptor
AC Power During Test	120VAC / 60Hz to Host PC Power Adaptor
AC Power Cord Type	Unshielded, 1.8m (Detachable)
EUT I/O Cable Type	Unshielded, 0.2m (Detachable)
OSC/Clock Frequencies	32.768kHz, 14.31818MHz, 25MHz, 24.576MHz

### **I/O PORT OF EUT**

I/O PORT TYPE	Q'TY	TESTED WITH
1). SIO Port	1	1
2). PS/2 one to two adaptor	1 / 1	1 / 1
3). Video-Out Port (VGA)	1	1
4). LAN Port	1	1

Note: Client consigns only one model sample (Model Number is GENE-8310) 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 monitor screen.
- 3. Run Winemc.exe and choose "F:/、G:/、H:/ & I:/" to test EUT.
- 4. Run Media Player.exe to play music.
- 5. Press the start menu, select executive and type ping 192.168.1.5 -t (EUT), ping 192.168.1.10 -t (Server Notebook).

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:

Con	duc	tion	•
COL	uuu	uon	

1. Normal Mode

**Radiation:** 

1	Normal Mode
1.	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.



# 4. SETUP OF EQUIPMENT UNDER TEST

### <u>Setup Diagram</u>

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

#### Support Equipment

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

No	Equipment	Model #	Serial #	FCC/BSMI ID	Trade Name
1	HDD (40GB)	MHT2040AT	N/A	N/A	FUJITSU
2	CPU (600MHz)	N/A	N/A	N/A	INTEL
3	RAM (DDR333 SD256M)	ESD26UC6AKSA-6B	PC2700S-2533-0-A1	N/A	ELPIDA
4	Adaptor	LE-9702B	N/A	D33299	LE

#### **Peripherals Devices:**

No	Equipment	Model	Serial No.	FCC/ BSMI ID	Trade Name	Data Cable	Power Cord
1	Ear. / Mic.	MSB301	N/A	N/A	e-Sense	Unshielded, 1.4m	N/A
2	Player	RQ-L11LT	N/A	BSMI ID: 3912A162	Panasonic	Unshielded, 1.4m	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	USB 2.0 HDD	F12-UF	N/A	BSMI ID: 4912A002	TeraSys	Shielded, 1.8m	Unshielded, 1.8m with a core
6	USB 2.0 HDD	F12-UF	N/A	BSMI ID: 4912A002	TeraSys	Shielded, 1.8m	N/A
7	USB 2.0 HDD	F12-U	N/A	BSMI ID: 4912A002	TeraSys	Shielded, 1.8m	N/A
8	USB 2.0 HDD	F12-U	N/A	BSMI ID: 4912A002	TeraSys	Shielded, 1.8m	N/A
9	Modem	5JEG4033MKO	N/A	5RJTAI-35500-M5-E	TOP- SOLUTION	Shielded, 0.7m	Unshielded, 1.8m
10	Monitor	710V	GS17H9NXA05855D	DoC BSMI: R33475	SAMSUNG	Shielded, 1.8m with two cores	Unshielded, 1.8m
11	Modem	5JEG4033MKO	N/A	5RJTAI-35500-M5-E	TOP- SOLUTION	Shielded, 0.7m	Unshielded, 1.8m
12	Printer	C20SX	N/A	BSMI ID: 3902E004	EPSON	Shielded, 1.8m	Unshielded, 1.8m
13	Server Notebook	M285	RD49R-7YTJR- B3C4K-G2JQX- DD3CG	DoC R31259	LEO	Unshielded, 20m	Unshielded, 1.8m

*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
USA	FCC	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	<b>FC</b> 250366
Japan	VCCI	3/10 meter Open Area Test Sites and Line Conducted Test Room to perform conducted/radiated measurements	<b>VCCI</b> 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
Canada	Industry Canada	RSS212, Issue 1	Canada IC 5742

*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 # I					
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE	
SITE NSA	CCS	I Site	N/A	09/17/2005	
MEASURE RECEIVER	SCHAFFNER	SCR3501	338	07/05/2005	
SPECTRUM ANALYZER	ADVANTEST	R3132	120900008	No Calibration Required	
ANTENNA	SCHAFFNER	CBL 6112B	2809	09/24/2005	
AMPLIFIER	SCHAFFNER	CPA9231A	3626	10/08/2005	
CABLE	BELDEN	9913	N-TYPE #I2	02/18/2006	
ATTENUATOR	MCL	UNAT-6	AT06-3	10/08/2005	
THERMO- HYGRO METER	TFA	N/A	NO.2	11/09/2005	
		Above 1GHz Used	l		
EMC ANALYZER (100Hz-22GHz)	HP	8566B	2937A06102	07/26/2005	
ANTENNA (1-18GHz)	EMCO	3115	5761	01/17/2006	
AMPLIFIER (1-18GHz)	HP	8449B	3008A01266	02/16/2006	
CABLE (1-18GHz)	JYEBAO	LL142	SMA#RS1&2	02/16/2006	

#### **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 # A					
EQUIPMENT	MFR	MODEL	SERIAL NUMBER	CAL. DUE	
TEST RECEIVER	R&S	ESHS20	840455/006	02/17/2006	
LISN (EUT)	SCHWARZBECK	NSLK 8127	8127382	01/03/2006	
LISN	SOLAR	8012-50-R-24-BNC	8305114	01/03/2006	
BNC CABLE	MIYAZAKI	5D-FB	BNC A1	01/28/2006	
THERMO- HYGRO METER	ТОР	HA-202	9303-1	03/02/2006	

*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.

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	73	-29.50	Q	L1

= Emission frequency in MHz
= Uncorrected Analyzer/Receiver reading
= Insertion loss of LISN + Cable Loss
= Read Level + Factor
= Limit stated in standard
= Reading in reference to limit
= Peak Reading
= Quasi-peak Reading
= Average Reading
= Hot side
= 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 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.



### **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 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	-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
Η	= 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: GENE-8310

**Temperature:** 25°C

#### Test Results: Passed

Test Mode: Mode 1

Humidity: 72% RH

Tested by: Jimmy 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 Investigated			150 kHz to 30 MHz					
	Read			Limit	Over	Reading		
Freq	Level	Factor	Level	Line	Limit	Туре	Line	
(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	(P/Q/A)	(L1/L2)	
2.088	37.88	0.25	38.13	73.00	-34.87	Р	L1	
2.664	41.30	0.28	41.58	73.00	-31.42	Р	L1	
2.144	37.80	0.32	38.12	73.00	-34.88	Р	L1	
2.594	40.27	0.34	40.61	73.00	-32.39	Р	L2	
3.041	41.00	0.35	41.35	73.00	-31.65	Р	L2	
5.362	35.35	0.49	35.84	73.00	-37.16	Р	L2	

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



#### **Radiated Emission**

Model: GENE-8310

**Temperature:** 27°C

#### Test Results: Passed

Test Mode: Mode 1

Humidity: 70% RH

#### Tested by: Alex Pan

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

Six Highest Radiated Emission Readings								
Frequency Range Investigated			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)	
125.0000	32.78	-7.22	40.00	42.52	-9.73	Р	V	
137.5050	36.88	-3.12	40.00	47.00	-10.12	Р	V	
150.0000	35.05	-4.95	40.00	45.69	-10.64	Р	V	
162.5150	35.70	-4.30	40.00	46.90	-11.20	Р	V	
125.0040	34.46	-5.54	40.00	44.20	-9.74	Р	Н	
137.5030	33.37	-6.63	40.00	43.49	-10.12	Р	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**

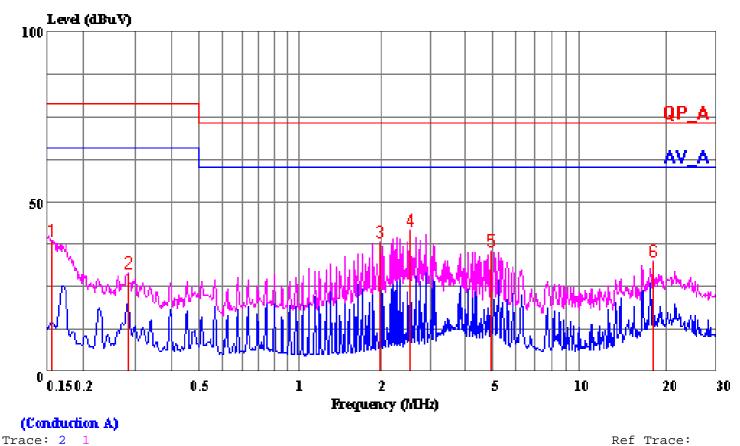
### **Conducted Emission Plot**

### **Radiated Emission Data**



#### Data#: 3 File#: 50331202CA.EMI

Date: 2005-04-04 Time: 09:40:22



Ref Trace:

Conditi	on: LII	NE
Report	No. :	50331202
Test En	ngr. :	Jimmy Chen
Company	• :	AAEON Technology Inc.
EUT	:	GENE-8310
Test Co	onfig :	EUT / ALL PERIPHERALS
Type of	Test:	FCC CLASS A
Mode of	0p.:	NORMAL MODE

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
_	MHz	dBuV	dB	dBuV	dBuV	dB	
1 2 3 4 5 6		38.43 28.65 37.88 41.30 35.30 31.25	0.14 0.18 0.25 0.28 0.38 1.35	38.57 28.83 38.13 41.58 35.68 32.60	79.00 73.00 73.00 73.00	-40.43 -50.17 -34.87 -31.42 -37.32 -40.40	Peak Peak Peak Peak

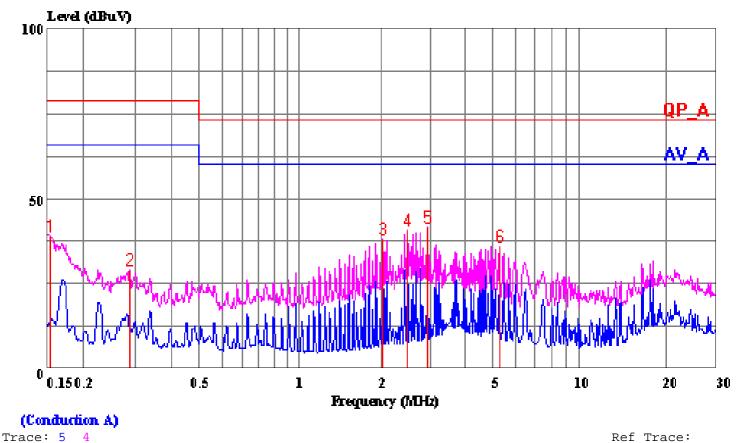
Page: 1



#### Data#: 6 File#: 50331202CA.EMI

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

Date: 2005-04-04 Time: 09:45:46



Ref Trace:

Condition: NE	UTRAL
Report No. :	50331202
Test Engr. :	Jimmy Chen
Company :	AAEON Technology Inc.
EUT :	GENE-8310
Test Config :	EUT / ALL PERIPHERALS
Type of Test:	FCC CLASS A
Mode of Op. :	NORMAL MODE

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1 2 3 4 5 6		38.96 28.69 37.80 40.27 41.00 35.35	0.13 0.15 0.32 0.34 0.35 0.49	38.12 40.61	79.00 73.00 73.00 73.00	-39.91 -50.16 -34.88 -32.39 -31.65 -37.16	Peak Peak Peak Peak

Page: 1

Custom Name: AAEON Technology Inc. Model Name: GENE-8310 Test Mode: NORMAL MODE Custom Name: GENE-8310 Test Mode: NORMAL MODE

Project No.: 50331202 Engineer Name: Alex Pan Date: 2005-04-01

ndex:											
30-dBu	V/m		EN5	5022 C	lass-A 10n	n Vertical					
											Limit -
70-											
50									_		QP K
50-				_					_		`
10-						3	<sup>3</sup> 4 5				
	1 ×					*	( <u>* *</u>		_		
30-											
20											_
.o-									_		
0-											MHz
30	•		•	• •	. ioo						300
30- <u>dBu</u>	V/m		EN5	5022 C	lass-A 10n	n Vertical					
											Linit -
′0- <del> -</del>									-		
50											QP K
50-											
+0-		_		7							
		6 ×		*						<b>`</b>	
30-											
20											
.o-											
0-											MHz
300									·	•	1000
	Freq(MHz)	Peak(dBuV/m)	QP(dBuV/m)	Margin(dB)	Limit(dBuV/m)	Reading(dBuV)	Factor(dB)	Height	Degree	Comr	nent
1				-7.90							
2				-7.22 -3.12							
4				-3.12							
5				-4.30					0		
6	365.9000	31.89		-15.11	47.00	36.48	-4.59	100	0		
7		36.30		-10.70					0		
8	843.8000	39.49		-7.51	47.00	36.61	2.88	100	0		

Site I

Custom Name: AAEON Technology Inc. Model Name: GENE-8310 Test Mode: NORMAL MODE Custom Name: GENE-8310 Test Mode: NORMAL MODE

Project No.: 50331202 Engineer Name: Alex Pan Date: 2005-04-01

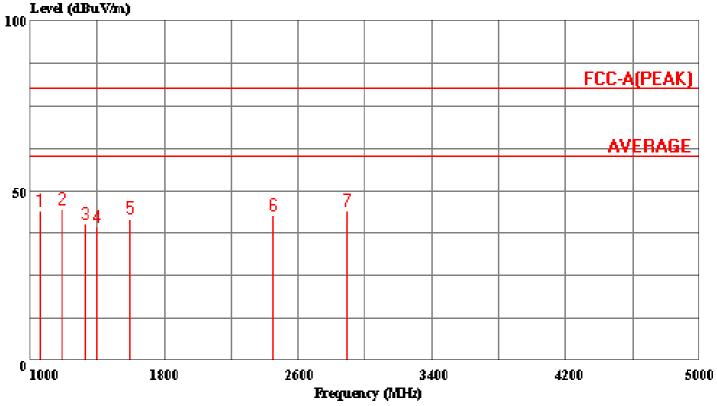
dex:											
0- <u>dBu</u>	V/m		EN55	5022 Cla	ss-A 10m	Horizont	al				_
											Limi
)-									+	 	
)-											Peal
											QP
)-									+		-
)-						2	9 <u>4 5</u>		_		4
$ \vdash $	1					Ť,	+ - * *				
)-	×										1
)-										 	-
ı-											
											Τ
-						,				 	
30					100					د	300
_dBu	V/m		EN55	5022 Cla	iss-A 10m	Horizont	al				_
											Lim
											6 đ
-											Peal
											QP
-		6									1
-=		×									=
ı-											
)-											1
)-											4
											MH
-Ļ 300				ī		i	i		i	: 1	000
	Freq(MHz)	Peak(dBuV/m)	QP(dBuV/m)	Margin(dB)	Limit(dBuV/m)	Reading(dBuV)	Factor(dB)	Height	Degree	Comment	
1				-10.83	-				- 0	 	
2				-10.85					0		
3				-6.63				100	0		
4				-8.44					0		
5	l			-7.41					0	 	
6	l			-10.01		41.59		100	0	 	
7	500.0650	37.53		-9.47	47.00	38.66	-1.13	100	0		

Site I



#### Data#: 10 File#: 50331202RS.EMI

Date: 2005-04-04 Time: 11:37:37



(Chamber RS)

Trace:

Ref Trace:

Condition: VEF	RTICAL / 3m
Report No. :	50331202
Test Engr. :	Jimmy Chen
Company :	AAEON Technology Inc.
EUT :	GENE-8310
Test Config :	EUT / ALL PERIPHERALS
Type of Test:	FCC CLASS A
Mode of Op. :	1-5GHz
:	ALL TEST DATA UNDER THE AVERAGE LIMIT

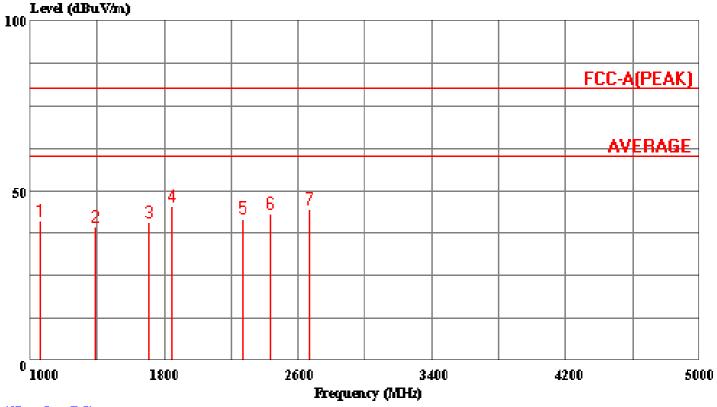
Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1 2 3 4 5 6 7	1060.000 1193.500 1328.500 1396.000 1598.500 2452.000 2895.000	55.10 49.60	-11.03 -10.30 -9.55 -9.19 -8.10 -4.24 -2.51	44.27 44.80 40.05 39.31 41.90 42.66 44.29	80.00 80.00 80.00 80.00 80.00	-35.73 -35.20 -39.95 -40.69 -38.10 -37.34 -35.71	Peak Peak Peak Peak Peak



#### Data#: 5 File#: 50331202RS.EMI

Date: 2005-04-04 Time: 11:34:46



(Chamber RS)

Trace:

Ref Trace:

Condition: HOP	RIZONTAL / 3m
Report No. :	50331202
Test Engr. :	Jimmy Chen
Company :	AAEON Technology Inc.
EUT :	GENE-8310
Test Config :	EUT / ALL PERIPHERALS
Type of Test:	FCC CLASS A
Mode of Op. :	1-5GHz
:	ALL TEST DATA UNDER THE AVERAGE LIMIT

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1 2 3 4 5 6 7	1060.000 1390.000 1708.000 1843.000 2273.500 2434.000 2667.500	52.10 48.60 48.10 52.20 47.10 47.80 47.90	-11.03 -9.22 -7.52 -6.80 -4.93 -4.31 -3.40	41.07 39.38 40.58 45.40 42.17 43.49 44.50	80.00 80.00 80.00 80.00 80.00	-38.93 -40.62 -39.42 -34.60 -37.83 -36.51 -35.50	Peak Peak Peak Peak Peak