

#### FCC CFR47 PART 15 DIGITAL DEVICE

### **TEST REPORT**

### **FOR**

#### **CPU Board**

**MODEL: GENE-4312 (N)** 

**REPORT NUMBER: 02E9923** 

ISSUE DATE: January 23, 2002

Prepared for

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

Prepared by

COMPLIANCE ENGINEERING SERVICES, INC. No. 199, CHUNG SHENG ROAD, HSIN TIEN CITY, TAIPEI, TAIWAN, R.O.C. TEL: (02) 2217-0894

TEL: (02) 2217-0894 FAX: (02) 2217-1254





U.S.A.: P.O.BOX 612650, SAN JOSE, CA 95161-2650 TAIPEI: P.O.BOX 17-82, HSIN TIEN, TAIWAN, R.O.C.

# TABLE OF CONTENTS

DESCRIPTION	PAGE
VERIFICATION OF COMPLIANCE	2
SYSTEM DESCRIPTION	3
PRODUCT INFORMATION	4
SUPPORT EQUIPMENT	5
MEASUREMENT PROCEDURE & LIMIT (LINE CONDUCTED EMISSION TEST)	6
MEASUREMENT PROCEDURE & LIMIT (RADIATED EMISSION TEST)	8
SUMMARY DATA	10
TEST EQUIPMENT	12
BLOCK DIAGRAM OF TEST SETUP	13
APPENDIX 1 PHOTOGRAPHS (TEST SETUP OF LINE CONDUCTED EMISSION TEST)	14
APPENDIX 2 PHOTOGRAPHS (TEST SETUP OF RADIATED  EMISSION TEST)	16
APPENDIX 3 PHOTOGRAPHS OF EUT	18
APPENDIX 4 CONDUCTED EMISSION PLOT & RADIATED	26
FMISSION DATA	

#### 1. VERIFICATION OF COMPLIANCE



COMPANY NAME: AAEON Technology Inc.

5F, No. 135, Lane 235, Pao Chiao Rd.,

Hsin-Tien City, Taipei, Taiwan, R. O. C.

CONTACT PERSON: Milo Wang / Q. E. Dept. Engineer

TELEPHONE NO: 8919-1234

MODEL NO/NAME: GENE-4312 (N)

SERIAL NO: N/A

DATE TESTED: January 11, 2002 ~ January 15, 2002

TYPE OF EQUIPMENT:	INFORMATION TECHNOLOGY EQUIPMENT (ITE)
MEASUREMENT DISTANCE:	( ) 3 METER ( × ) 10 METER
TECHNICAL LIMIT:	Class A
FCC RULES:	PART 15 – Subpart(B) / CISPR 22 limit applied
MEASUREMENT PROCEDURE	ANSI C63.4:92
EQUIPMENT AUTHORIZATION PROCEDURE	VERIFICATION
MODIFICATION MADE ON EUT	☐ YES   ⊠ NO
DEVIATIONS FROM MEASUREMENT PROCEDURE	☐ YES (refer to section 21 for comments) ☑ NO
RADIATED EMISSION TEST RESULT	-2.41 dB @ 147.371MHz / HORIZONTAL
CONDUCTED EMISSION TEST RESULT	-26.88 dB @ 3.584MHz / L2

The above equipment was tested by Compliance Engineering Services, Inc. for compliance with the requirements set forth in the FCC CFR 47, PART 15. The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved By	Acknowledged By
Rick yell	
RICK YEO / EMC MANAGER	Milo Wang / Q.E. Dept. Engineer
COMPLIANCE ENGINEERING SERVICES	AAEON Technology Inc.

### SYSTEM DESCRIPTION

### **EUT Test Procedure:**

- 1. Windows 98 Boots System.
- 2. Run Winemc. Exe To Activate All Peripherals And Display "H" Pattern On Monitor Screen.
- 3. Data Through the EUT and Transmit Between Server Notebook and EUT Via RJ45 Cable.

# PRODU INFORMATION

**Housing Type:** METAL

**EUT Power Rating:** DC 12V to AC Adaptor

**AC power during Test:** 120VAC / 60Hz From AC Adaptor

**AC Adaptor Manufacturer:** CHI

AC Adaptor Model Number: CH-1205

**AC Power Cord Type:** Un-shielded, 1.8m (Detachable)

**DC Cable Type:** Shielded, 0.8m (Non-Detachable),

Two ferrite cores on the cable of DC Jack

**OSC/Clock Frequencies:** X2, X3 = 25 MHz; Y3 = 14.318 MHz

#### I/O Port of EUT:

I/O PORT TYPES	Q'TY	TESTED WITH
1). USB Port	2	2
2). PS/2 Port	1	1
3). RJ45 Port	2	1
4). Mini-DB26	1	N/A
5). DB9 Port (Serial)	2	2
6). DB15 Port (VGA)	1	1
7). DB25 Port (Parallel)	1	1
8). Phone Jack	3	3
9).RCA (Video)	1	1
10).S-Video (Video)	1	1

Note: N/A

# SUPPORT EQUIPMENT

### **Host Computer:**

Equipment	Model#	Serial#	Trade Name
Hard Driver	DARA-206000	N/A	IBM
RAM (SDRAM 64MB PC100)	D4564163G5-A10-9JF	N/A	NEC
CPU	GX1-300MHz	N/A	Cyrix
Chassis	AEC-6000	N/A	AAEON
Power Board	AEC-6000 Rev.A0.2	N/A	AAEON

### **External Peripheral Devices:**

No	Equipment	Model	Serial	FCC	Trade Name	Data	Power
		#	#	ID		Cable	Cord
1.	Player	RQ-L309GT	N/A	N/A	PANASONIC	Unshielded, 1.2m	N/A
2.	Mic.&Ear.	MSB-206	N/A	N/A	E.SENSE	Unshielded, 2.3 m	N/A
3.	USB Mouse	MU3UE	N/A	DoC	ACROX	Shielded, 1.7m	N/A
4.	USB Mouse	MU3UE	N/A	DoC	ACROX	Shielded, 1.7m	N/A
5.	PS/2 Mouse	M-S34	LZED1303050	DZL211029	LOGITECH	Shielded, 1.9m	N/A
6.	PS/2 Keyboard	6311-TW4C/6	N/A	DoC	ACER	Shielded, 1.7m	N/A
7.	Monitor	RB15NS	N/A	DoC	SAMSUNG	Unshielded, 1.4m	Shielded, 1. 8m With a core
8.	Modem	2496CF	N/A	N/A	DATATRONICS	Shielded, 1.4 m	Unshielded, 1.8m
9.	Modem	231AA	A25331083841	BFJ9D9308US	HAYES	Shielded, 0.8 m	Unshielded, 1.8m
10.	Printer	2225C	2550540697	BS46XU2225C	HP	Shielded, 1.8 m	Unshielded, 1.8m
11.	Monitor	RB17NS	N/A	DoC	SAMSUNG	Unshielded, 1.8m	Shielded, 1. 8m With a core
12.	Monitor	PH19HS	N/A	DoC	SAMSUNG	Shielded, 1.8m With two cores	Unshielded, 1.8m
13.	Server Notebook	PT900L-09G4H	X1046383J	N/A	Toshiba	Unshielded, 30m (RJ45)	Unshielded, 1.8m
14.	Cable	N/A	N/A	N/A	N/A	Unshielded, 1.0m(RJ45)	N/A

**Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals.

**Grounding:** Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

# MEASUREMENT PROCEDURE (PRELIMINARY LINE CONDUCTED EMISSION TEST)

**DATE:** January 23, 2002

- 1) The equipment was set up as per the test configuration to simulate typical actual 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.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 12V power through AC Adaptor and Line Impedance Stabilization Network (LISN) which supplied power source of 120VAC/ 60Hz and was grounded to the ground plane.
- 5) All support equipment received power from a second LISN supplying power of 110VAC/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / 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 Analyzer / 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 Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

#### Mode:

No.	Mode of operation	Mode of operation Date	
1	640 X 480	01/11/2002	9462F#(85)
2	800 X 600	01/11/2002	9462F#(77)
3	1024 X 768	01/11/2002	9462F#(126, 129)

10) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

#### Mode(s): 3.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

<u>6 OF 26</u>

# MEASUREMENT PROCEDURE (FINAL LINE CONDUCTED EMISSION TEST)

- 1) EUT and support equipment was set up on the test bench as per step 10 of the preliminary test.
- 2) 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 A.V. limit in Q.P. mode, then the emission signal was re-checked using an Average detector.
- 3) The test data of the worst case condition(s) was reported on the Summary Data page.

#### **Data Sample:**

-	(MHz)	(dBuV)	(dB)	(dBuV) 48.38	(dBuV) <b>66.00</b>	(dB) -17.62	(P/Q/A)	(L1/L2) L1
	Freq	Reading	C.F.	Reading	Limits	Margin	Type	Line
		Meter		Corrected			Reading	

C.F.(Correction Factor)=Insertion Loss + Cable Loss Corrected Reading = Metering Reading + C.F. Margin=Corrected Reading - Limits

P=Peak Reading L1=Hot Q=Quasi-peak L2=Neutral

A=Average Reading

Comments: N/A

# LINE CONDUCTED EMISSION LIMIT (EN 55022)

Frequency	Maximum RF Line Voltage		
	Q.P.	AVERAGE	
150kHz-500kHz	79dBuV	66dBuV	
500kHz-5MHz	73dBuV	60dBuV	
5MHz-30MHz	73dBuV	60dBuV	

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

# MEASUREMENT PROCEDURE (PRELIMINARY RADIATED EMISSION TEST)

- 1) The equipment was set up as per the test configuration to simulate typical actual 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 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.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 12V power source from AC Adaptor (120VAC/60Hz) and outlet socket under the turntable. All support equipment received 110VAC/60Hz to power from another socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.4: 1992. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. 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.
- 7) The following test mode(s) were scanned during the preliminary test:

#### Mode:

No.	Mode of operation	Date	Data Report/Plot No.
1	640 X 480	01/11/2002	9462D#(05)
2	800 X 600	01/11/2002	9462D#(06)
3	1024 X 768	01/11/2002	9462D#(02, 07)
4	1-2G	01/15/2002	9923G#(02. 07)

8) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

#### Mode(s): 3.

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for reference of final testing.

# MEASUREMENT PROCEDURE (FINAL RAIDATED EMISSION TEST)

- 1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- 2) The Analyzer / Receiver scanned from 30MHz to 2000MHz. 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.
- 3) 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 Peak reading is presented. If EUT emission level was less-2dB to the limit, then the emission signal was re-checked using a Q.P. detector.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

## **Data Sample:**

_	Meter	~ =	Corrected			Reading	
Freq	Reading	C.F.	Reading	Limits	Margin	Type	Pol.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	P/Q/A	H/V
X.XX	X.XX	X.XX	40.82	47.00	-6.18	P	V

C.F.(Correction Factor)=Antenna Factor + Cable Loss + Attenuator(3/6dB) - Amplifier Gain Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading H=Horizontal Polarization/Antenna Q=Quasi-peak V=Vertical Polarization/Antenna A=Average Reading

Comments: N/A

# RADIATED EMISSION LIMIT

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBu V/m/ Q.P.)
30-230	10	40
230-1000	10	47

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

# **SUMMARY DATA** (LINE CONDUCTED TEST)

**Model Number:** GENE-4312 (N) **Location:** Conducted Room

Tested by: James Liao

**Test Model:** Mode 3

Test Results: Passed

**Temperature:** 21 **Humidity:** 74%RH

(The chart below shows the highest readings taken from the final data)

	Frequency Range Investigated (150 kHz TO 30 MHz)									
	Meter		Corrected			Reading				
Freq	Reading	C.F.	Reading	Limits	Margin	Type	Line			
(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	(P/Q/A)	(L1/L2)			
0.183	50.36	0.02	50.38	79.00	-28.62	P	L1			
3.584	42.18	0.21	42.39	73.00	-30.61	P	L1			
0.183	50.16	0.02	50.18	79.00	-28.82	P	L2			
0.549	39.30	0.05	39.35	73.00	-33.65	P	L2			
2.201	38.45	0.14	38.59	73.00	-34.41	P	L2			
3.584	45.91	0.21	46.12	73.00	-26.88	P	L2			

C.F.(Correction Factor)=Insertion Loss + Cable Loss

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading L1=Hot Q=Quasi-peak L2=Neutral

A=Average Reading

Comments: N/A

# SUMMARY DATA (RADIATED EMISSION TEST)

**Model Number:** GENE-4312 (N) **Location:** Site # D

**Tested by:** Cliff Lai **Polar:** Vertical / Horizontal— 10m

**Test Mode:** Mode 3

Test Results: Passed

**Temperature:** 20 **Humidity:** 73%RH

(The chart below shows the highest readings taken from the final data)

	Frequency Range Investigated (30 MHz TO 2000 MHz)								
	Meter		Corrected			Reading			
Freq	Reading	C.F.	Reading	Limits	Margin	Type	Pol.		
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	P/Q/A	H/V		
134.000	41.10	-6.46	34.64	40.00	-5.36	P	V		
147.900	42.24	-5.36	36.88	40.00	-3.12	P	$\mathbf{V}$		
177.200	40.29	-6.30	33.99	40.00	-6.01	P	$\mathbf{V}$		
110.578	43.21	-10.21	33.00	40.00	-7.00	P	Н		
133.929	43.57	-8.19	35.38	40.00	-4.62	P	Н		
147.371	44.83	-7.24	37.59	40.00	-2.41	P	Н		

C.F.(Correction Factor)=Antenna Factor + Cable Loss - Amplifier Gain ( + Attenuator 6dB)

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading H=Horizontal Polarization/Antenna Q=Quasi-peak V=Vertical Polarization/Antenna

A=Average Reading

Comments: N/A

**DATE:** January 23, 2002

# **TEST EQUIPMENT LIST (EMISSION)**

**Instrumentation:** The following list contains equipment used at Compliance Engineering Services, Inc., for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 9kHz to 1.0 / 2.0 GHz.

### **Equipment used during the tests:**

Open Area Test Site: #D

				Cal Date	Due Date
Equipment	Manuf.	Model No.	Serial No.		
EMI TEST	R&S	DSAI-D 804.8932.52	827832/001	10/29/01	10/28/02
DISPLAY					
EMI TEST RF	R&S	ESBI-RF/1005.4300.52	827832/003	10/29/01	10/28/02
UNIT					
AMPLIFIER	HP	8447DB	1644A02328	05/07/01	05/06/02
ANTENNA	SCHWARZBECK	VULB 9160	3104	05/17/01	05/16/02
CABLE	TIME MICROWAVE	LMR-400	N-TYPE02	07/09/01	07/08/02
ANTENNA	EMCO	3115	5761	02/23/01	02/22/02
(1-18GHz)					
CABLE	JYEBAO	N30-L142-1	N/A	03/02/01	03/02/02
(1-18GHz)					
AMPLIFIER	MITEQ	NSP2600-44	646455	02/26/01	02/26/02
(1-26GHz)					

**◯** Conducted Area Test Site: Conducted Room

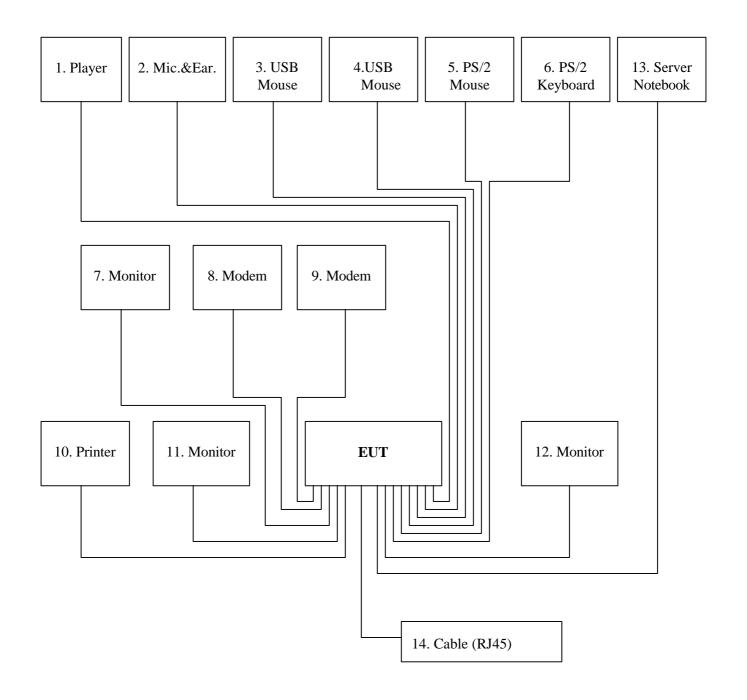
				Cal Date	Due Date
Equipment	Manuf.	Model No.	Serial No.		
TEST RECEIVER	R&S	ESHS20	840455/006	03/15/01	03/14/02
LISN	SOLAR	8012-50-R-24-BNC	8305114	07/23/01	07/22/02
LISN(EUT)	EMCO	3825/2	9108-1842	01/11/02	01/10/03

The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

# **BLOCK DIAGRAM OF TEST SETUP**

### **System Diagram of Connections between EUT and Simulators**

**EUT:** CPU Board **Model Number:** GENE-4312 (N)



# **APPENDIX 1**

# PHOTOGRAPHS OF TEST SETUP (TEST SETUP OF LINE CONDUCTED EMISSION )

# LINE CONDUCTED EMISSION TEST





# **APPENDIX 2**

# PHOTOGRAPHS OF TEST SETUP (TEST SETUP OF LINE RADIATED EMISSION )

# **RADIATED EMISSION TEST**





# **APPENDIX 3**

# PHOTOGRAPHS OF EUT



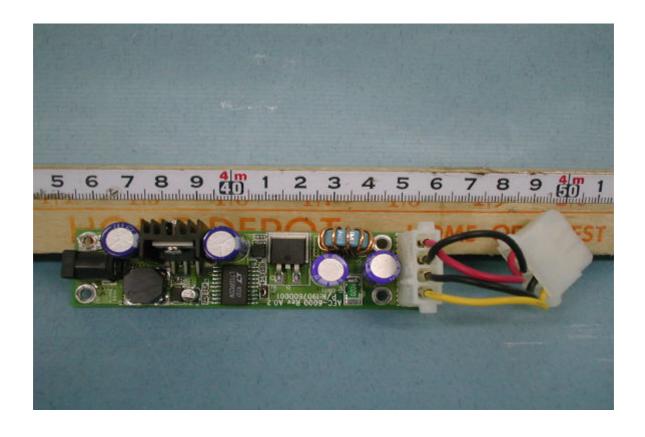


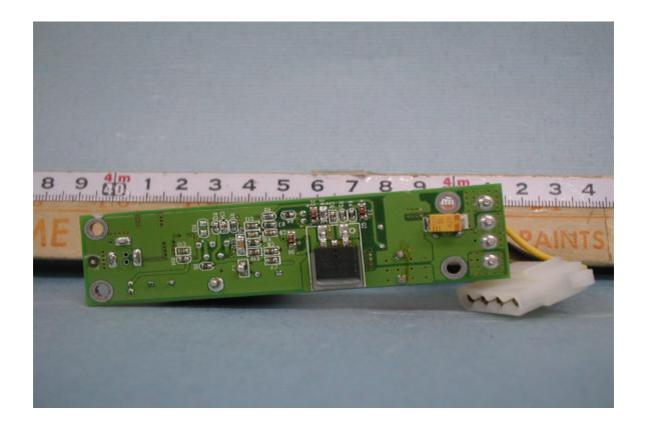
























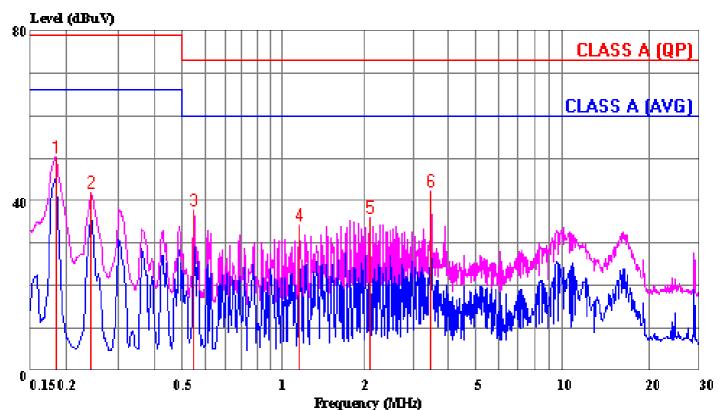
# **APPENDIX 4**

# CONDUCTED EMISSION PLOT RADIATED EMISSION DATA



Tel:02-2217-0894 Fax:02-2217-1254

Data#: 126 File#: 9462f.EMI Date: 2002-01-11 Time: 18:45:15



#### (Compliance D-Site)

Trace: 68 69 Ref Trace:

Condition: LINE

Report No. : 02E9923 Test Engr. : JAMES LIAO

Company : AAEON Technology, Inc.

EUT : GENE-4312(N)

Test Config : EUT/ALL PERIPHERALS

Type of Test: FCC CLASS A W/ EN 55022 CLASS A LIMIT

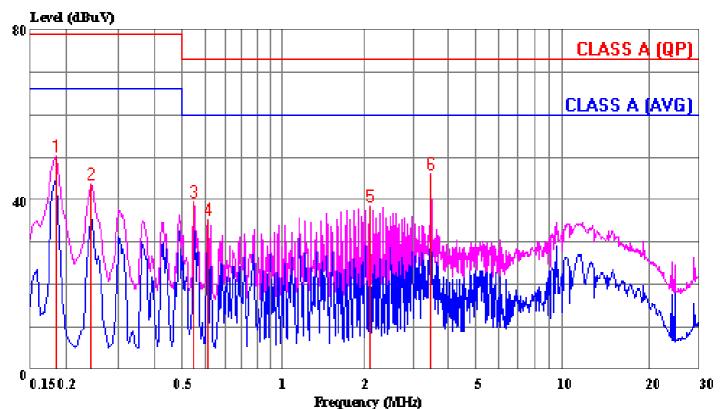
Mode of Op. : 1024X768(WORST)

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dв	dBuV	dBuV	dB	
1	0.183	50.36	0.02	50.38	79.00	-28.62	Peak
2	0.243	41.80	0.02	41.82	79.00	-37.18	Peak
3	0.549	37.72	0.05	37.77	73.00	-35.23	Peak
4	1.262	34.19	0.10	34.29	73.00	-38.71	Peak
5	2.201	36.04	0.14	36.18	73.00	-36.82	Peak
6	3.584	42.18	0.21	42.39	73.00	-30.61	Peak



Tel:02-2217-0894 Fax:02-2217-1254

Data#: 129 File#: 9462f.EMI Date: 2002-01-11 Time: 19:10:22



#### (Compliance D-Site)

Trace: 92 93 Ref Trace:

Condition: NEUTRAL Report No. : 02E9923 Test Engr. : JAMES LIAO

Company : AAEON Technology, Inc.

EUT : GENE-4312(N)

Test Config : EUT/ALL PERIPHERALS

Type of Test: FCC CLASS A W/ EN 55022 CLASS A LIMIT

Mode of Op. : 1024X768(WORST)

Daac	•	- 1
Page	•	

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.183	50.16	0.02	50.18	79.00	-28.82	Peak
2	0.243	43.76	0.02	43.78	79.00	-35.22	Peak
3	0.549	39.30	0.05	39.35	73.00	-33.65	Peak
4	0.611	35.28	0.06	35.34	73.00	-37.66	Peak
5	2.201	38.45	0.14	38.59	73.00	-34.41	Peak
6	3.584	45.91	0.21	46.12	73.00	-26.88	Peak



Tel:02-2217-0894 Fax:02-2217-1254

Date: 2002-01-11 Time: 11:50:29 Data#: 2 File#: 9462d.emi

CCS D-Site

Condition: VERTICAL / 10m Report No. : 02E9923

Test Engr. : CLIFF LAI

Company : AAEON Technology, Inc.

EUT : GENE-4312(N)

Test Config : EUT/ALL PERIPHERALS

Type of Test: FCC CLASS A W/ EN 55022 CLASS A LIMIT

Mode of Op. : 1024X768(WORST)

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	$\overline{\mathtt{dBuV/m}}$	$\overline{\mathtt{dBuV/m}}$	dB	
1	48.044	38.84	-8.15	30.70	40.00	-9.31	Peak
2	65.831	39.68	-8.61	31.07	40.00	-8.93	Peak
3	73.887	42.63	-10.78	31.85	40.00	-8.15	Peak
4	110.600	41.33	-9.16	32.17	40.00	-7.83	Peak
5	134.000	41.10	-6.46	34.64	40.00	-5.36	Peak
6	147.900	42.24	-5.36	36.88	40.00	-3.12	Peak
7	167.000	38.54	-5.62	32.92	40.00	-7.08	Peak
8	177.200	40.29	-6.30	33.99	40.00	-6.01	Peak
9	206.556	37.22	-7.94	29.28	40.00	-10.72	Peak
10	250.667	41.79	-6.20	35.59	47.00	-11.41	Peak
11	300.000	37.01	-4.79	32.22	47.00	-14.78	Peak



Tel:02-2217-0894 Fax:02-2217-1254

Data#: 7 File#: 9462d.emi Date: 2002-01-11 Time: 13:48:15

CCS D-Site

Condition: HORIZONTAL / 10m

Report No. : 02E9923

Test Engr. : CLIFF LAI

Company : AAEON Technology, Inc.

EUT : GENE-4312(N)

Test Config : EUT/ALL PERIPHERALS

Type of Test: FCC CLASS A E/ EN 55022 CLASS A LIMIT

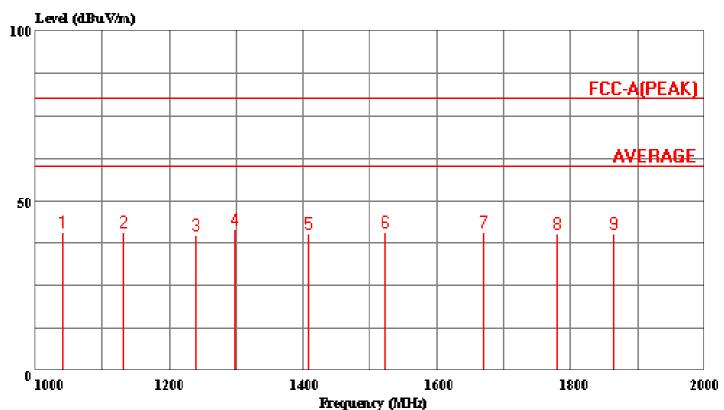
Mode of Op. : 1024X768(WORST)

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	$\overline{\text{dBuV/m}}$	$\overline{\text{dBuV/m}}$	dB	
1	47.991	34.80	-9.51	25.29	40.00	-14.72	Peak
2	65.749	39.58	-9.86	29.72	40.00	-10.29	Peak
3	73.711	41.10	-11.99	29.11	40.00	-10.89	Peak
4	110.578	43.21	-10.21	33.00	40.00	-7.00	Peak
5	133.929	43.57	-8.19	35.38	40.00	-4.62	Peak
6	147.371	44.83	-7.24	37.59	40.00	-2.41	Peak
7	167.407	36.84	-7.46	29.38	40.00	-10.62	Peak
8	177.007	39.38	-8.20	31.18	40.00	-8.82	Peak
9	205.693	37.65	-9.76	27.89	40.00	-12.11	Peak
10	250.547	39.88	-6.63	33.25	47.00	-13.75	Peak
11	300.022	42.02	-4.91	37.11	47.00	-9.89	Peak



Tel:02-2217-0894 Fax:02-2217-1254

Data#: 2 File#: 9923g.emi Date: 2002-01-15 Time: 23:19:52



### (CES Chamber)

Trace: Ref Trace:

Condition: VERTICAL / 3m Report No. : 02E9923 Test Engr. : BILL HUANG

Company : AAEON Technology, Inc.

EUT : GENE-4312 (N)

Test Config : EUT/ALL PERIPHERALS

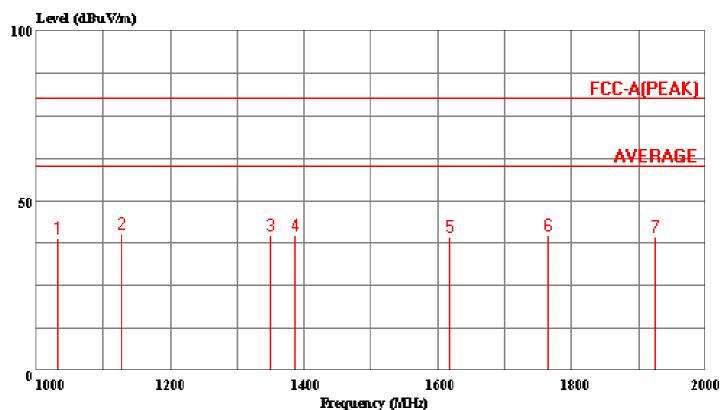
Type of Test: FCC CLASS A W/ Limit + 20log(3/10)
Mode of Op. : 1-2G/All Test Datas Under Average Limit

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	${\mathrm{dBuV/m}}$	dBuV/m	dB	·
1	1042.000	53.45	-12.55	40.90	80.00	-39.10	Peak
2	1132.000	52.91	-12.15	40.76	80.00	-39.24	Peak
3	1239.000	51.40	-11.67	39.73	80.00	-40.27	Peak
4	1299.000	52.85	-11.40	41.45	80.00	-38.55	Peak
5	1409.000	51.19	-10.91	40.28	80.00	-39.72	Peak
6	1522.000	51.08	-10.38	40.70	80.00	-39.30	Peak
7	1669.000	50.29	-9.66	40.63	80.00	-39.37	Peak
8	1779.000	49.36	-9.11	40.25	80.00	-39.75	Peak
9	1864.000	49.14	-8.69	40.45	80.00	-39.55	Peak



Tel:02-2217-0894 Fax:02-2217-1254

Data#: 7 File#: 9923g.emi Date: 2002-01-15 Time: 23:55:02



### (CES Chamber)

Trace: Ref Trace:

Condition: HORIZONTAL / 3m Report No. : 02E9923 Test Engr. : BILL HUANG

Company : AAEON Technology, Inc.

EUT : GENE-4312 (N)

Test Config : EUT/ALL PERIPHERALS

Type of Test: FCC CLASS A W/ Limit + 20log(3/10)
Mode of Op. : 1-2G/All Test Datas Under Average Limit

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	1032.000	51.49	-12.60	38.89	80.00	-41.11	Peak
2	1127.000	52.38	-12.17	40.21	80.00	-39.79	Peak
3	1349.000	50.98	-11.18	39.80	80.00	-40.20	Peak
4	1387.000	50.76	-11.01	39.75	80.00	-40.25	Peak
5	1617.000	49.32	-9.91	39.41	80.00	-40.59	Peak
6	1764.000	48.85	-9.19	39.66	80.00	-40.34	Peak
7	1924.000	47.93	-8.40	39.53	80.00	-40.47	Peak