Verification of Compliance

Product Name	:	**Fanless embedded controller**
Model Number	:	**xxxxxAEC-6613-xxxxxxxx (Where x is 0-9，A-Z，-or blank) for marketing purpose**
Applicant	:	**AAEON Technology Inc.**
Address	:	**5F,NO.135,Lane 235,Pao Chiao Rd. Hsin-Tien Dist,New Taipei City,Taiwan,R.O.C.**
Report Number	:	**F-U070-1112-255**
Issue Date	:	**January 5, 2012**

Applicable Standards : **FCC Part 15, Subpart B Class A ITE**
ANSI C63.4:2003
Industry Canada ICES-003 Issue 4
CSA-IEC CISPR22: 02 Class A ITE

One sample of the designated product has been tested in our laboratory and found to be in compliance with the FCC rules cited above.

NVLAP LAB CODE 200575-0

TAF 0905
FCC CAB Code TW1053
IC Code 4699A
VCCI Accep. No. R-1527, C-1609, T-1441, G-10

Central Research Technology Co.
EMC Test Laboratory
11, Lane 41, Fushuen St., Jungshan Chiu,
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J. Y. Shih

(Tsun-Yu Shih/General Manager)
Date: January 5, 2012

FCC Test Report

for

Fanless embedded controller

Model No.	**:**	**xxxxxAEC-6613-xxxxxxxx (Where x is 0-9，A-Z，-or blank) for marketing purpose**
Report Number	**:**	**F-U070-1112-255**
Date of Receipt	**:**	**December 27, 2011**
Date of Report	**:**	**January 3, 2012**

Prepared for

AAEON Technology Inc.

5F, NO.135, Lane 235, Pao Chiao Rd. Hsin-Tien Dist, New Taipei City, Taiwan, R.O.C.

Prepared by

Central Research Technology Co.
EMC Test Laboratory

11, Lane 41, Fushuen St., Jungshan Chiu, Taipei, Taiwan, 104, R.O.C.

NVLAP LAB CODE 200575-0

Verification of Compliance

Equipment Under Test	**:**	Fanless embedded controller
Model No.	**:**	xxxxxAEC-6613-xxxxxxxx (Where x is 0-9，A-Z，-or blank) for marketing purpose
Applicant	**:**	AAEON Technology Inc.
Address	**:**	5F, No.135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City, Taiwan, R.O.C.
Applicable Standards	**:**	**FCC Part 15, Subpart B Class A ITE** **ANSI C63.4:2003** **Industry Canada ICES-003 Issue 4** **CSA-IEC CISPR22: 02 Class A ITE**
Date of Testing	**:**	December 27~30, 2011
Deviation	**:**	N/A
Condition of Test Sample	**:**	Engineering Sample

We, **Central Research Technology Co**., hereby certify that one sample of the designated product was tested in our facility during the period mentioned above. The test records, data evaluation and Equipment Under Test (EUT) configurations shown in the present report are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in the present report is in compliance with the requirements set forth in the standards mentioned above and apply to the tested sample identified in the present report only. The test report shall not be reproduced, except in its entirety, without the written approval of Central Research Technology Co.

PREPARED BY : Janice Chou , **DATE :** Jan. 5, 2012
(Janice Chou/System Executive)

APPROVED BY : J. Y. Shih , **DATE :** Jan. 5, 2012
(Tsun-Yu Shih/General Manager)

Contents

1. General Description

1.1 General Description of EUT

Equipment Under Test	:	Fanless embedded controller
Model No.	:	xxxxxAEC-6613-xxxxxxxx (Where x is 0-9，A-Z，- or blank) for marketing purpose
Power In	:	Supplied by the power adapter
Power Adapter Specification	:	Trade Name : FSP Model No. : FSP060-DBAB1 Input : 100-240V~1.3A, 50/60Hz Output : 12Vdc, 3.33A MAX
Highest Operating Frequency	:	2.13GHz from the test specification
Manufacturer	:	AAEON Technology Inc.

Function Description :

The EUT is an engineering sample of the Fanless embedded controller. Please refer to the user's manual for the details.

The Model Number TF-AEC-6613-A1M-1010 was selected by its manufacturer to perform all tests. It was taken as the representative condition for test and its data are recorded in the present document.

The I/O ports of EUT are listed below:

No.	I/O Port Type	Quantity
1	D-Sub port	1
2	USB port	4
3	RS232 port	4
4	LAN port	2
5	Line output port	1
6	CF Card Slot	1

The devices (supplied by the manufacturer) can be installed inside the EUT are listed below:

Components	Specification
M/B	GENE-CV05-xxxxxx (Where x is 0-9，A-Z，-or blank) for marketing purpose
CPU Board	GENE-CV05 REV.A0.2
CPU	INTEL ATOM D2700 2.13GHz
DC Power Board	PER-P21D REV A0.1
Memory	DSL DDR3-800 2GB
HDD	WD，WD3200BEVT，320GB
OSC	14.31818MHZ；25MHZ；32.768KHz；27MHZ
Power Supply	AC Adapter Manufacturer：FSP AC Adapter Module Number：FSP060-DBAB1 AC Adapter Power Rating：I/P：100~240VAC, 1.3A, O/P：12Vdc/5A，60Watt

1.2 Test Mode

Normal operating as the customer’s requirement.

The EUT with D-Sub 1920 x 1200@60Hz resolution to monitor was selected by the manufacturer to be tested herein.

1.3 Applied standards

According to the specifications of the manufacturer and the requirements set in 47CFR Part 15, the applied standards to evaluate the compliance of the EUT are as following, and the measurement procedures specified in ANSI C63.4: 2003 are performed.

According to 47CFR Part 15 Section 15.33(b), the test frequency range of radiated emission measurements are listed below and the EUT herein shall be tested as:

Type of EUT	**Highest frequency generated or used in the device or on which the device operates or tunes (MHz)**	**Upper frequency of measurement range (MHz)**
☐	Below 1.705	30
☐	1.705 - 108	1000
☐	108 - 500	2000
☐	500 - 1000	5000
☑	Above 1000	5^{th} harmonic of the highest frequency or 40GHz, whichever is lower

All the test items are as following:

Applied Standards	**Test Items**	**Results**
FCC Part 15, Subpart B Class A ITE	☑ Conducted Emission Measurement	PASS
	☑ Radiated Emission Measurement	PASS

1.4 Test Setup for the EUT

The EUT is an unique unit connected with other necessary accessories and support units listed in the next section. It has been tested against each standard after the following setup steps:

a. Connect the EUT and all the support units to the appropriate power source.
b. Turn on the EUT and all the accessories and support units.
c. Install an EMC test software into the EUT and execute it under the Windows environment.
d. The EUT sends “H” patterns to the monitor, which fills the whole screen of it.
e. The EUT sends messages to the modems.
f. The EUT reads/writes messages from/to the USB Flash Disk(s)/ CF Card.
g. The EUT send 1kHz audio signal to the earphones.
h. Another PC sends/ receives messages to/ from the EUT through a Hub by executing the command of “PING”.
i. Repeat and keep setup steps listed above before and during all tests.

EUT I/O ports / Peripherals	Exerciser Program (software)	Version of Program
EUT	BurnIn Test.exe	V 6.0
Monitor		
USB Flash Disk(s)		
Modem		
Earphone & Microphone		
CF Card		

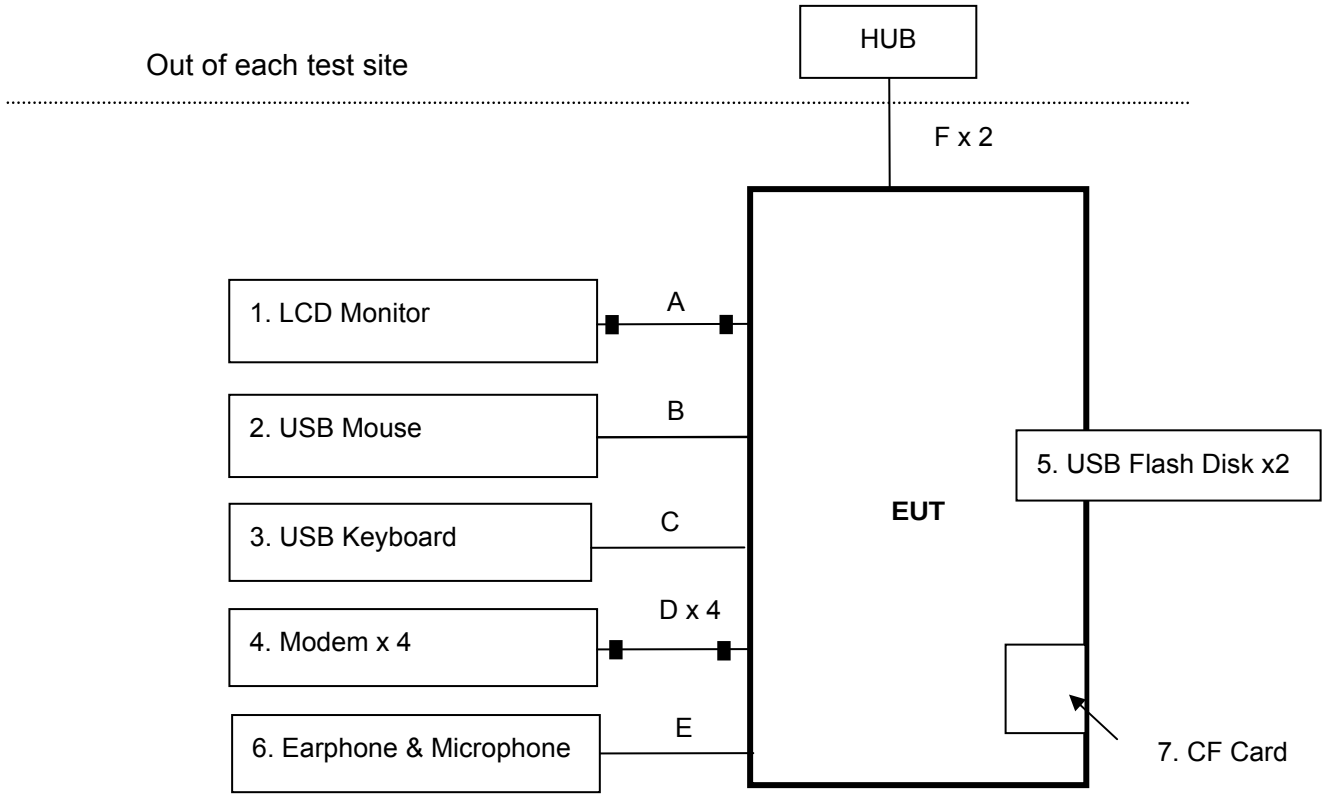
1.5 The Support Units

No.	Unit	Model No./ Serial No.	FCC ID	Trade Name	Power Cord	Supported by lab.
1	Monitor	2408WFP(Note 1)/ CN-0NN792-74261-849-154S	DoC	DELL	1.8m	✓
		U2410(Note2)/ CN-0J257M-72872-083-069L	DoC	DELL	1.8m	✓
2	USB Mouse	MO56UC/ 516034297	DoC	DELL	N/A	✓
3	USB Keyboard	SK-8115/ CN-0J4635-71616-55G-0AGX	DoC	DELL	N/A	✓
4	Modem	DM-1414/0311055092	IFAXDH1414	ACEEX	1.9m	✓
		DM-1414/0509019802	IFAXDH1414	ACEEX	1.9m	✓
		DM-1414/0509019805	IFAXDH1414	ACEEX	1.9m	✓
		DM-1414/0509019801	IFAXDH1414	ACEEX	1.9m	✓
5	USB Flash Disk	U172/100-029	DoC	PQI	N/A	✓
		U172/100-038	DoC	PQI	N/A	✓
6	Earphone & Microphone	ET-E220/2009-005(Note 1)	N/A	ERGOTECH Technology	N/A	✓
		AM-110/20090715-4(Note 2)	DoC	andymay	N/A	✓
7	CF Card (8GB)	N/A	N/A	INNODISK	N/A	

Note 1: Used for Conducted Emission Test.

Note 2: Used for Radiated Emission Test.

1.6 Layout of the Setup



Connecting Cables :

No.	Cable	Length	Shielded	Core	Shielded Backshell	Supported by lab.	Note
A	VGA Cable	1.7m	✓	✓		✓	2Cores
B	USB Mouse Cable	1.8m	✓			✓	
C	USB Keyboard Cable	1.8m	✓			✓	
D	Modem Cable	1.8m	✓	✓		✓	2Cores
E	Earphone & Microphone Cable	1.8m	✓			✓	
F	LAN Cable	>3m				✓	

1.7 Test Capability

Test Facility

The test facility used for evaluating the conformance of the EUT with each standard in the present report meets what required in CISPR16-1-4, CISPR16-2-3 and ANSI C63.4: 2003.

Test Room	Type of Test Room	Descriptions
TR1	10m semi-anechoic chamber (23m × 14m × 9m)	Complying with the NSA requirements in documents CISPR 22 and ANSI C63.4: 2003. for the radiated emission measurement.
TR11	3m semi-anechoic chamber (9m × 6m × 6m)	
TR5	Shielding Room (8m × 5m × 4m)	For the conducted emission measurement.

Test Laboratory Competence Information

Central Research Technology Co. has been accredited / filed / authorized by the agencies listed in the following table.

Certificate	Nation	Agency	Code	Mark
Accreditation Certificate	USA	NVLAP	200575-0	ISO/IEC 17025
	R.O.C. (Taiwan)	TAF	0905	ISO/IEC 17025
	R.O.C. (Taiwan)	BSMI	SL2-IN-E-0033, SL2-IS-E-0033, SL2-R1/R2-E-0033, SL2-A1-E-0033 SL2-L1-E-0033	ISO/IEC 17025
Site Filing Document	USA	FCC	474046,TW1053	Test facility list & NSA Data
	Canada	IC	4699A-1,-3	Test facility list & NSA Data
	Japan	VCCI	R-1527,C-1609,T-1441,G-10	Test facility list & NSA Data
Authorization Certificate	Germany	TUV	10021687	ISO/IEC 17025
	Norway	Nemko	ELA 212	ISO/IEC 17025

The copy of each certificate can be downloaded from our web site: www.crc-lab.com

2. Conducted Emission Measurement

Test Result : PASS

2.1 Limits for Emission Measurement

☑ Limits for conducted disturbances at the power mains

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

Note 1- The lower limit shall apply at the transition frequency.
Note 2- The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz for Class B equipment.

2.2 Test Instruments

Test Site and Equipment	Manufacturer	Model No./ Serial No.	Last Calibration Date	Calibration Due Date
Test Receiver	R&S	ESCS 30/ 836858/021	Jan. 14, 2011	Jan. 14, 2012
LISN	R&S	ESH2-Z5/ 836613/001	June 2, 2011	June 2, 2012
2nd LISN	R&S	ENV4200/ 833209/010	Jan. 14, 2011	Jan. 14, 2012
50Ω terminator	N/A	N/A/ 001	Aug. 20, 2011	Aug. 20, 2012
RF Switch	N/A	RSU28/ 338965/002	Aug. 20, 2011	Feb. 20, 2012
RF Cable	N/A	N/A/ C0052 ~ 56	Aug. 20, 2011	Feb. 20, 2012
Test Software	Audix	e3/ Ver. 5.2004-2-19k	NCR	NCR
TR5 shielded room	ETS LINDGREN	TR5/ 15353-F	NCR	NCR

Note:

1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.

Measurement Uncertainty

The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than U_{cispr} in table 1 of CISPR 16-4-2.

Equipment	Model Number	Uncertainty Value
LISN	ESH2-Z5	3.1dB
	ENV 4200	2.8dB

2.3 Test Procedures

a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.

b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane and 0.4 meters from the conducting wall of the shielded room. Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane.

c. Connect the EUT's power source to the appropriate power mains through the LISN.

d. All the other peripherals are connected to the 2nd LISN, if any.

e. The LISN was placed 0.8 meters from the EUT and at least 0.8 meters from other units and other metal planes.

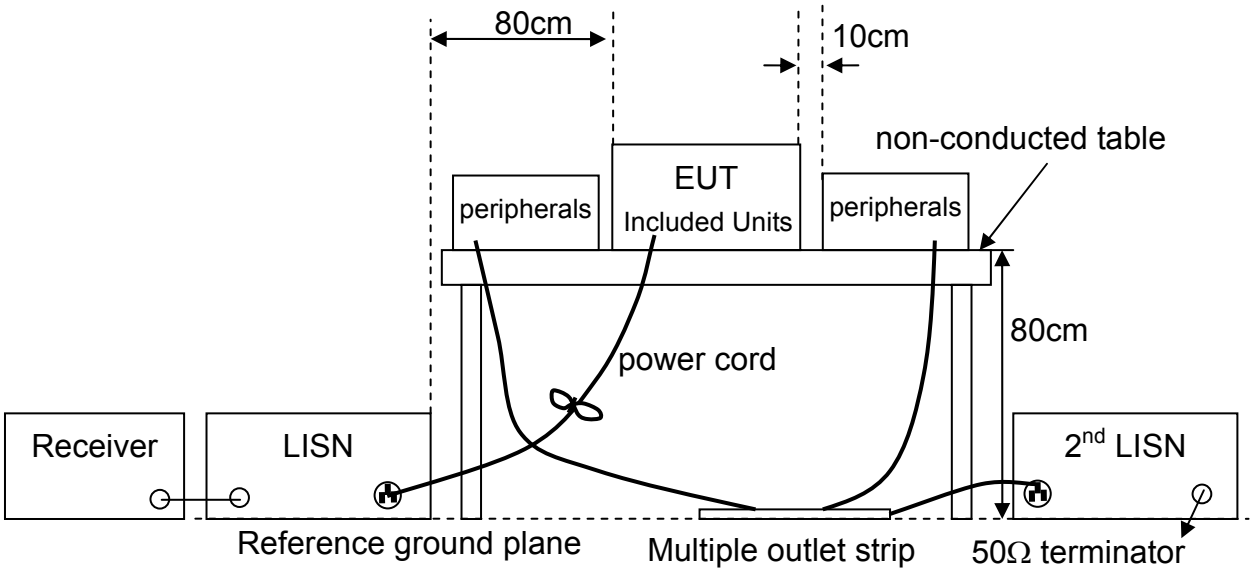
f. Measure the conducted emissions on each power line (Neutral Line and Line 1 – Hot side) of the EUT's power source by using the test receiver connected to the coupling RF output port of LISN.

g. Rapidly scan the signal from 150kHz to 30MHz by using the receiver through the Maximum-Peak detector to determine those frequencies associated with higher emission levels for each measured line.

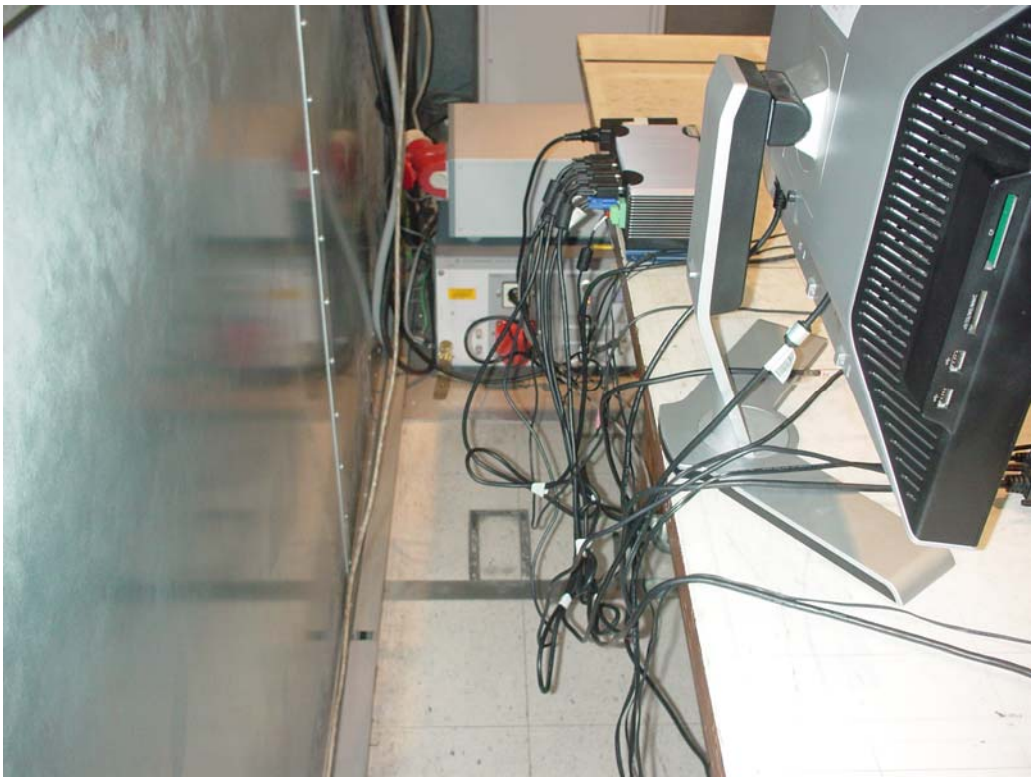
h. Then measure the maximum level of conducted disturbance for each frequency found from step g. by using the receiver through the Quasi-Peak and Average detectors per CISPR 16-1.

i. Record the level for each frequency and compare with the required limit.

2.4 Test Configurations

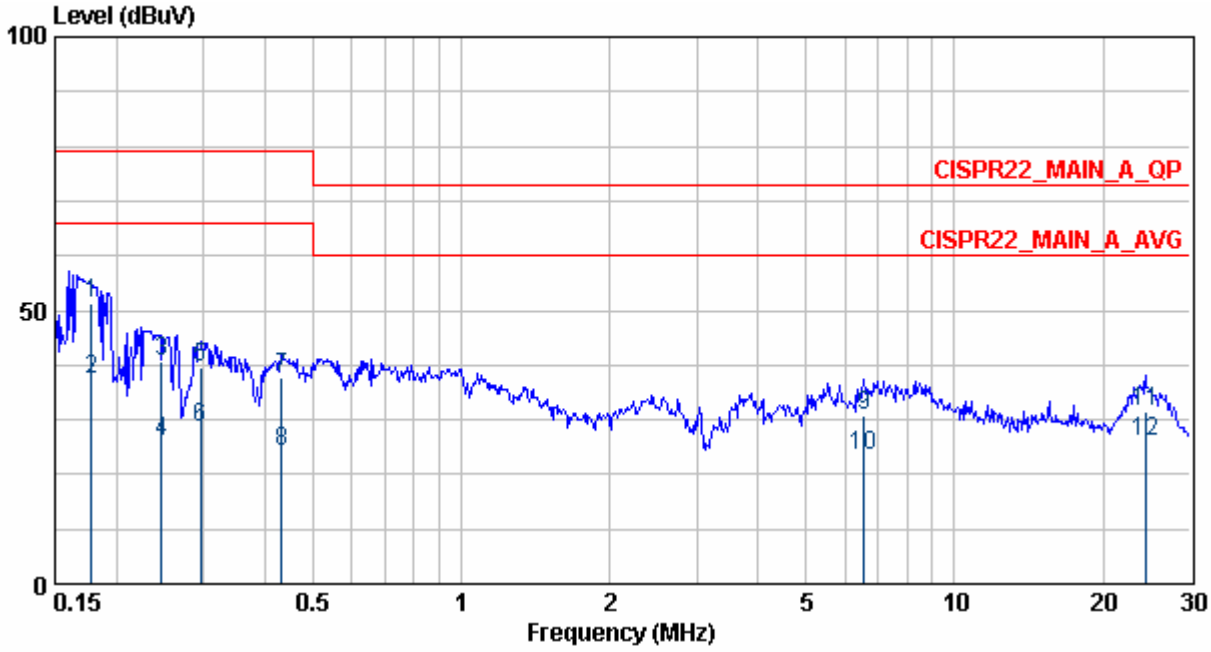


2.5 Photographs of the Test Configurations



2.6 Test Results

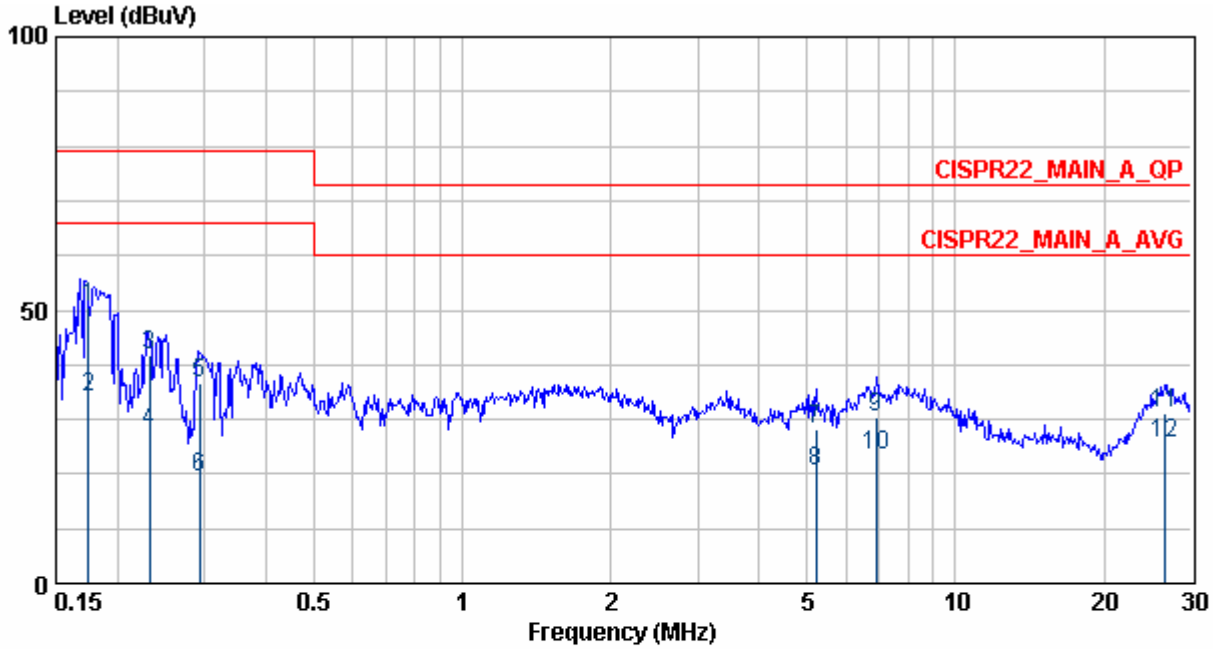
Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Mathew	**Temperature**	:	24°C
Humidity	:	53%RH	**Frequency Range**	:	150kHz~30MHz
IF Bandwidth	:	9kHz	**Phase**	:	**Line**



	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.178	51.37	0.22	51.15	79.00	-27.63	LINE	QP
2	0.178	37.52	0.22	37.30	66.00	-28.48	LINE	AVERAGE
3	0.247	40.57	0.23	40.34	79.00	-38.43	LINE	QP
4	0.247	26.04	0.23	25.81	66.00	-39.96	LINE	AVERAGE
5	0.296	39.59	0.24	39.35	79.00	-39.41	LINE	QP
6	0.296	28.44	0.24	28.20	66.00	-37.56	LINE	AVERAGE
7	0.433	37.75	0.26	37.49	79.00	-41.25	LINE	QP
8	0.433	24.35	0.26	24.09	66.00	-41.65	LINE	AVERAGE
9	6.557	30.77	0.56	30.21	73.00	-42.23	LINE	QP
10	6.557	23.55	0.56	22.99	60.00	-36.45	LINE	AVERAGE
11	24.400	31.52	1.26	30.26	73.00	-41.48	LINE	QP
12	24.400	26.14	1.26	24.88	60.00	-33.86	LINE	AVERAGE

Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + insertion loss of LISN.
3. Q.P. is abbreviation of quasi-peak.

Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Mathew	**Temperature**	:	24°C
Humidity	:	53%RH	**Frequency Range**	:	150kHz~30MHz
IF Bandwidth	:	9kHz	**Phase**	:	**Neutral**



	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.175	50.39	0.21	50.18	79.00	-28.61	NEUTRAL	QP
2	0.175	34.12	0.21	33.91	66.00	-31.88	NEUTRAL	AVERAGE
3	0.232	41.81	0.23	41.58	79.00	-37.19	NEUTRAL	QP
4	0.232	27.67	0.23	27.44	66.00	-38.33	NEUTRAL	AVERAGE
5	0.293	36.49	0.24	36.25	79.00	-42.51	NEUTRAL	QP
6	0.293	19.53	0.24	19.29	66.00	-46.47	NEUTRAL	AVERAGE
7	5.221	28.11	0.49	27.62	73.00	-44.89	NEUTRAL	QP
8	5.221	20.47	0.49	19.98	60.00	-39.53	NEUTRAL	AVERAGE
9	6.914	30.30	0.53	29.77	73.00	-42.70	NEUTRAL	QP
10	6.914	23.46	0.53	22.93	60.00	-36.54	NEUTRAL	AVERAGE
11	26.558	31.00	0.58	30.42	73.00	-42.00	NEUTRAL	QP
12	26.558	25.66	0.58	25.08	60.00	-34.34	NEUTRAL	AVERAGE

Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + insertion loss of LISN.
3. Q.P. is abbreviation of quasi-peak.

3. Radiated Emission Measurement

Test Result : PASS

3.1 Limits for Emission Measurement

☑ Limits for radiated disturbances below 1000MHz

Frequency (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1000	49.5	54
Note 1- The lower limit shall apply at the transition frequency. Note 2- Additional provisions may be required for cases where interference occurs. Note 3- According to 15.109(g), as an alternative to the radiated emission limits shown above, digital devices may be shown to comply with the standards (CISPR), Pub. 22 shown as below.		
30 to 230	40	30
230 to 1000	47	37

☐ Limits for radiated disturbances in the frequency range 1000MHz ~ 2000MHz at a measuring distance of 10m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 2	69.5	49.5	63.5	43.5

☑ Limits for radiated disturbances above 1000MHz at a measuring distance of 3m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

3.2 Test Instruments

☑ For Measurement at the distance of 10m

Test Site and Equipment	Manufacturer	Model No./ Serial No.	Last Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESCS 30/ 836858/020	Sept. 8, 2011	Sept. 8, 2012
Broadband Antenna	R&S	HL-562/ 360543/007	March 29, 2011	March 29, 2012
Broadband Antenna	R&S	HL-562/ 830547/010	April 26, 2011	April 26, 2012
Pre-Amplifier	Mini Circuit	ZKL-2/ 001	July 18, 2011	Jan. 18, 2012
Pre-Amplifier	Mini Circuit	ZKL-2/ 002	July 18, 2011	Jan. 18, 2012
Spectrum	R&S	FSP7/ 100108	June 10, 2011	June 10, 2012
Spectrum	R&S	FSP40/ 100031	July 4, 2011	July 4, 2012
RF Cable	JYEBAO	0214/ C0049	July 18, 2011	Jan. 18, 2012
RF Cable	JYEBAO	0214/ C0050	July 18, 2011	Jan. 18, 2012
Test Software	Audix	e3/ Ver. 4.3.714.e	NCR	NCR
TR1 Semi - anechoic Chamber	ETS. LINDGREN	TR1/ 17627-B	April 23, 2011	April 23, 2012

Note:

1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.
3. The calibration date of the semi-anechoic chamber listed above is the date of NSA measurement.

☑ For Measurement at the distance of 3m

Test Site and Equipment	Manufacturer	Model No./ Serial No.		Last Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESCI/ 100019		May 25, 2011	May 25, 2012
Bi-Log Antenna	EMCO	3142C/ 52088		May 19, 2011	May 19, 2012
Horn Antenna	EMCO	3117/ 00082847		March 1, 2011	March 1, 2012
Bore-sight Antenna Mast	Sunol	TLT2/ 051110-5		NCR	NCR
Pre-Amplifier	KMIC	☐	KMA010180A01/ 99056	Oct. 12, 2011	Oct. 12, 2012
	Mini Circuit	☐	ZKL-2/ 004	Aug. 6, 2011	Feb. 6, 2012
	MITEQ	☑	JS4-00101800-28-10P/1498979	Dec. 21, 2011	Dec. 21, 2012
	MITEQ		JS4-00101800-28-5A/742309	Dec. 14, 2011	Dec. 14, 2012
Spectrum Analyzer	Agilent	E4407B/ MY45106795		May 2, 2011	May 2, 2012
RF Cable	N/A	N/A/ C0080		Aug. 6, 2011	Feb. 6, 2012
RF Cable	N/A	N/A/ C0081		Oct. 17, 2011	April 17, 2012
Test Software	Audix	e3/ Ver. 4.3.714.e		NCR	NCR
TR11 Semi - anechoic Chamber	ETS. LINDGREN	TR11/ 906-A		April 17, 2011	April 17, 2012

Note:
1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.
3. The calibration date of the semi-anechoic chamber listed above is the date of NSA measurement.

Measurement Uncertainty

The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than U_{cispr} in table 1 of CISPR 16-4-2.

Test Site (Measuring distance)	**Polarization**	**Frequency Range**	
		30MHz ~200MHz	200MHz ~1000MHz
TR1(10m)	Horizontal	3.5dB	3.9dB
	Vertical	3.5dB	3.9dB
TR11(3m)	Horizontal	3.5dB	3.9dB
	Vertical	3.8dB	3.9dB

Test Site (Measuring distance)	**Polarization**	**Frequency Range**	
		1GHz ~18GHz	18GHz~26GHz
TR11(3m)	Horizontal	3.5dB	4.4dB
	Vertical	3.6dB	4.5dB

3.3 Test Procedures

a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.

b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane in the semi-anechoic chamber. If the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane in the semi-anechoic chamber.

c. For the measurement of frequency below 1000MHz, the EUT was set 10m away from the interference receiving antenna for the limit of Class A equipment or CISPR 22. For Class B equipment and the measurement of frequency above 1000MHz, the EUT was set 3m away from the interference receiving antenna.

d. Rapidly sweep the signal in the test frequency range by using the spectrum through the Maximum-peak detector.

e. Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4 meters above the reference ground plane continuously to determine at least six frequencies associated with higher emission levels and record them.

f. For measurement of frequency above 1000MHz, the beamwidth of receiving horn antenna should keep covering EUT when the receiving horn antenna height varied.

g. Then measure each frequency found from step e. by using the spectrum with rotating the EUT and positioning the receiving antenna height to determine the maximum level.

h. Finely tune the antenna and turntable around the recorded position of each frequency found from step f.

i. For measurement of frequency below 1000MHz, set the receiver detector to be Quasi-Peak per CISPR 16-1 to find out the maximum level occurred.

j. For measurement of frequency above 1000MHz, set the spectrum detector to be Peak or Average to find out the maximum level occurred, if any.

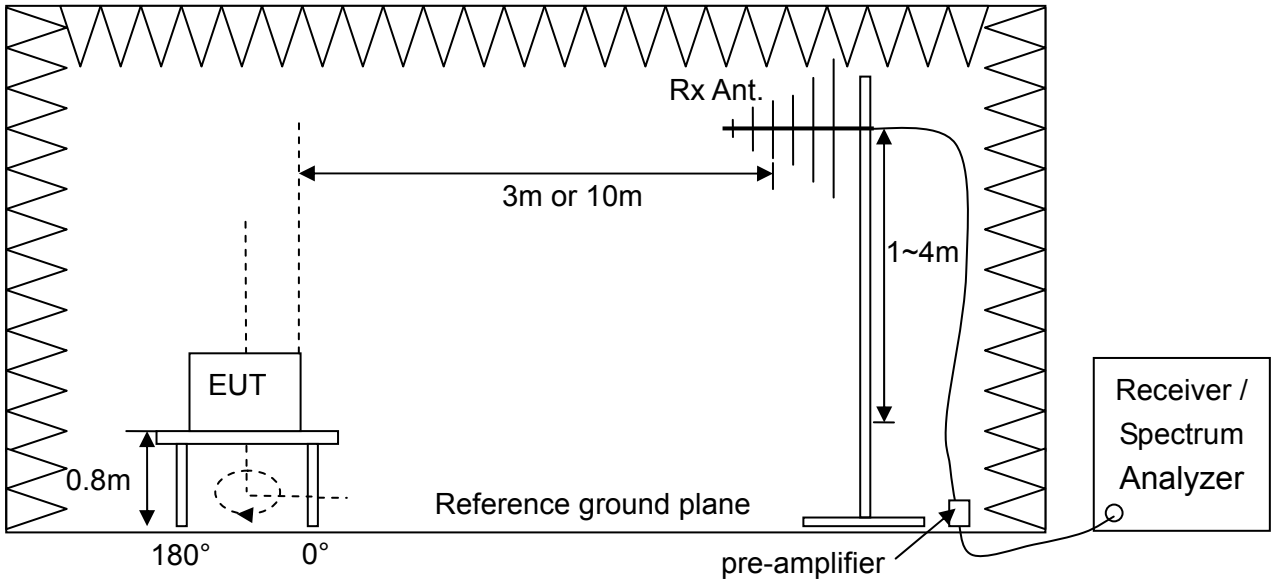
k. Record frequency, azimuth angle of the turntable, height, and polarization of the receiving antenna and compare the maximum level with the required limit.

l. Change the receiving antenna to another polarization to measure radiated emission by following step d. to k. again.

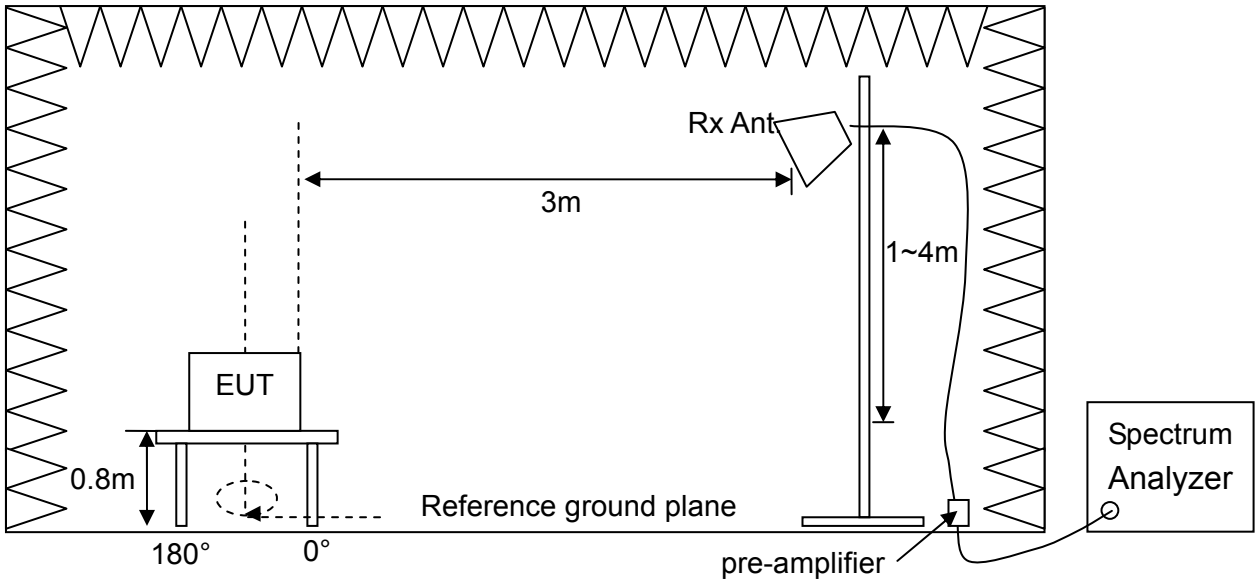
m. If the peak emission level measured from step e. is 4dB lower than the limit specified, then the emission values presented will be the peak value only. Otherwise, accurate Q.P. value will be measured and presented.

3.4 Test Configurations

Radiated Emission Measurement below 2000MHz



Radiated Emission Measurement above 1000MHz (if any)

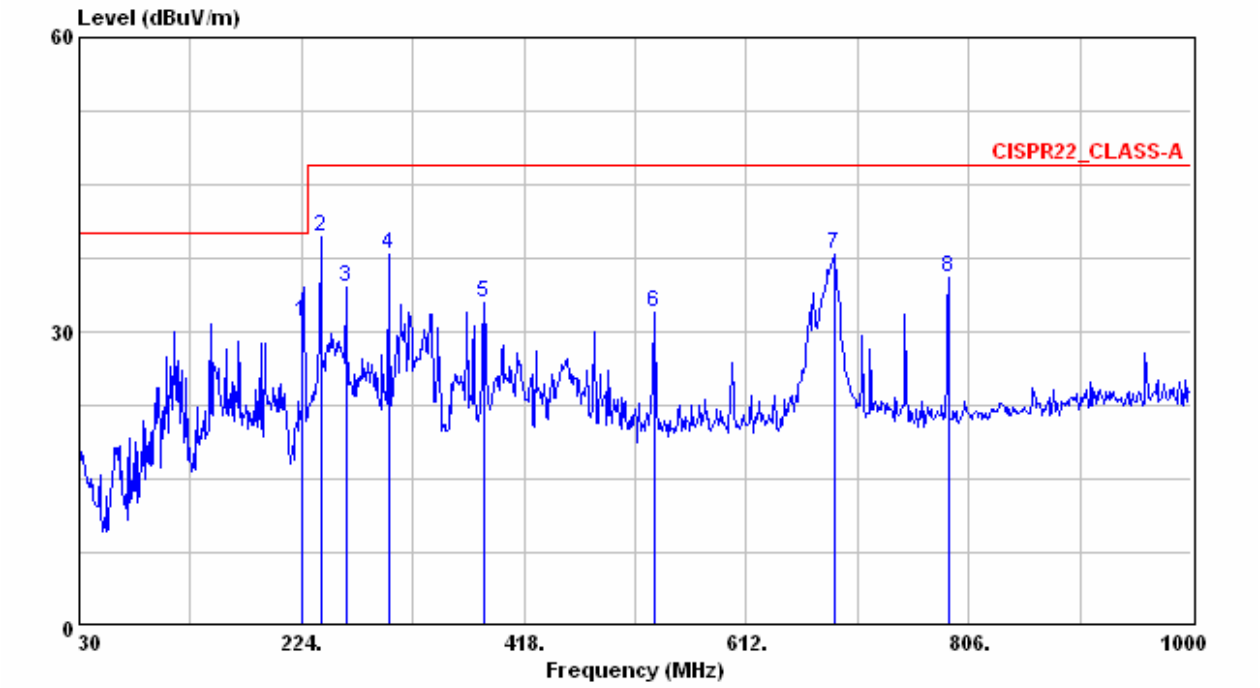


3.5 Photographs of the Test Configurations

3.6 Test Results

Radiated Emission Measurement below 1000MHz

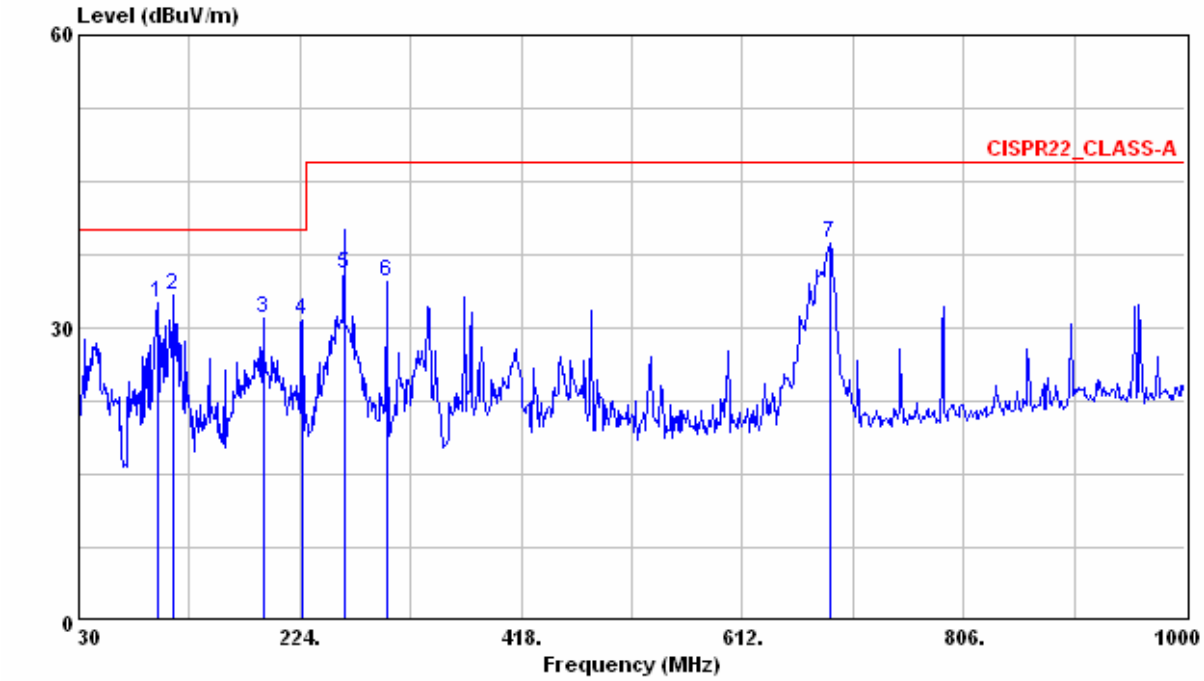
Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Meng	**Temperature**	:	22°C
Humidity	:	56%RH	**Frequency Range**	:	30MHz~1GHz
IF Bandwidth	:	120kHz	**Polarization**	:	**Horizontal**



	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB/m	dBuV	dBuV/m	dB		cm	deg	
1	225.021	31.07	-19.49	50.56	40.00	-8.93	HORIZONTAL	329	121	QP
2	240.490	39.62	-18.42	58.04	47.00	-7.38	HORIZONTAL	---	---	Peak
3	262.800	34.61	-17.64	52.25	47.00	-12.39	HORIZONTAL	---	---	Peak
4	299.660	37.82	-16.11	53.93	47.00	-9.18	HORIZONTAL	---	---	Peak
5	383.080	32.99	-14.06	47.05	47.00	-14.01	HORIZONTAL	---	---	Peak
6	531.490	31.92	-9.98	41.90	47.00	-15.08	HORIZONTAL	---	---	Peak
7	688.630	37.84	-7.66	45.50	47.00	-9.16	HORIZONTAL	---	---	Peak
8	788.540	35.54	-6.18	41.72	47.00	-11.46	HORIZONTAL	---	---	Peak

Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.
3. Q.P is abbreviation of quasi-peak.

Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Meng	**Temperature**	:	22°C
Humidity	:	56%RH	**Frequency Range**	:	30MHz~1GHz
IF Bandwidth	:	120kHz	**Polarization**	:	**Vertical**

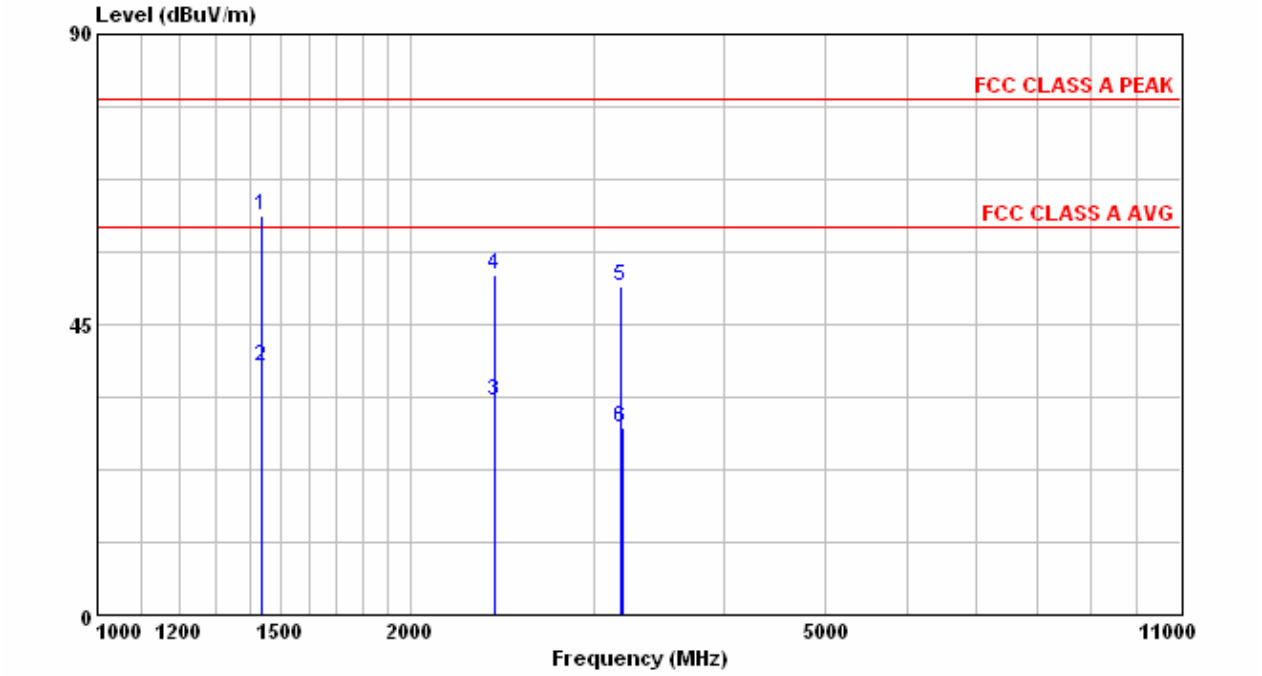


	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB/m	dBuV	dBuV/m	dB		cm	deg	
1	98.870	32.51	-19.75	52.26	40.00	-7.49	VERTICAL	---	---	Peak
2 @	113.420	33.29	-19.20	52.49	40.00	-6.71	VERTICAL	---	---	Peak
3	191.990	31.01	-20.85	51.86	40.00	-8.99	VERTICAL	---	---	Peak
4	225.940	30.88	-19.17	50.05	40.00	-9.12	VERTICAL	---	---	Peak
5	262.520	35.59	-17.62	53.21	47.00	-11.41	VERTICAL	246	18	QP
6	299.660	34.73	-16.26	50.99	47.00	-12.27	VERTICAL	---	---	Peak
7	688.630	38.78	-6.88	45.66	47.00	-8.22	VERTICAL	---	---	Peak

Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.
3. Q.P is abbreviation of quasi-peak.

Radiated Emission Measurement above 1000MHz

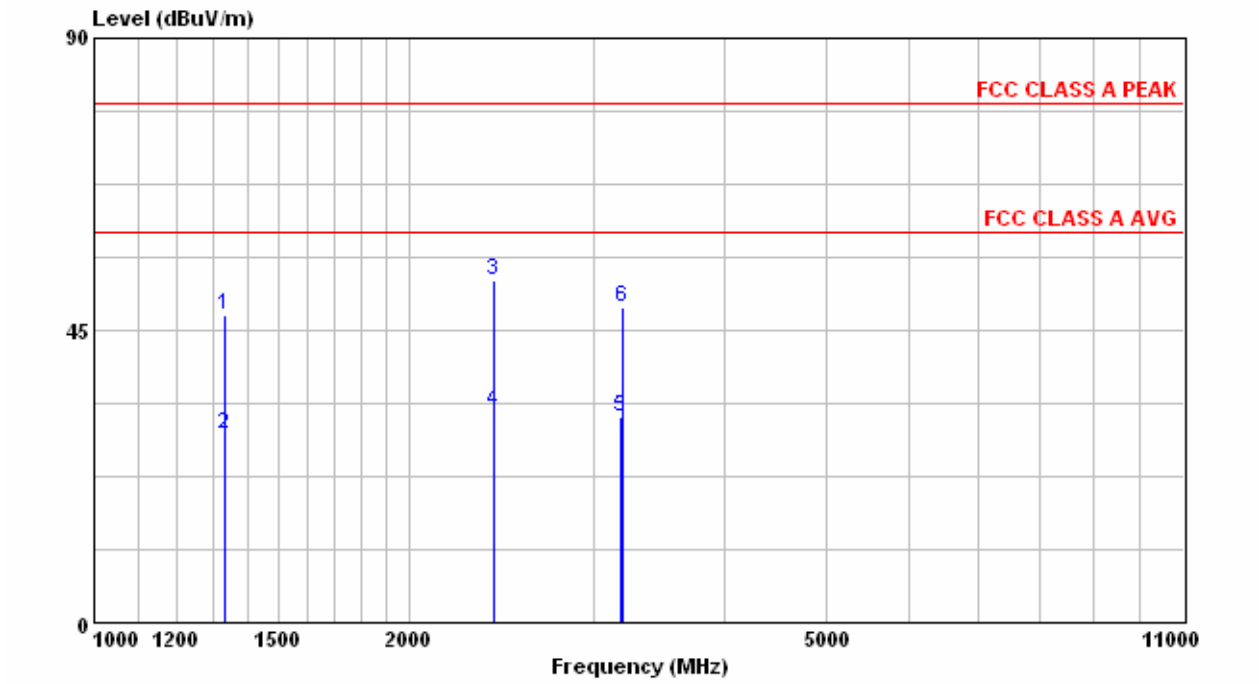
Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Meng	**Temperature**	:	22°C
Humidity	:	56%RH	**Frequency Range**	:	1GHz ~11GHz
IF Bandwidth	:	1MHz	**Polarization**	:	**Horizontal**



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Ant Pos	Table Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1440.000	61.96	103.16	-41.20	80.00	-18.04	316	273	HORIZONTAL	Peak
2	1441.130	38.63	79.83	-41.20	60.00	-21.37	315	270	HORIZONTAL	Average
3	2413.680	33.22	69.04	-35.82	60.00	-26.78	195	350	HORIZONTAL	Average
4	2414.460	52.68	88.50	-35.82	80.00	-27.32	199	352	HORIZONTAL	Peak
5	3191.300	50.97	86.16	-35.19	80.00	-29.03	215	166	HORIZONTAL	Peak
6	3192.760	29.15	64.34	-35.19	60.00	-30.85	211	165	HORIZONTAL	Average

Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.

Test Mode	:	As description of section 1.2			
Test Voltage	:	120V/60Hz to the power adapter			
Tester	:	Meng	**Temperature**	:	22°C
Humidity	:	56%RH	**Frequency Range**	:	1GHz ~11GHz
IF Bandwidth	:	1MHz	**Polarization**	:	**Vertical**



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Ant Pos	Table Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1331.780	47.28	88.42	-41.14	80.00	-32.72	296	171	VERTICAL	Peak
2	1332.190	29.14	70.28	-41.14	60.00	-30.86	300	174	VERTICAL	Average
3	2413.360	52.83	88.65	-35.82	80.00	-27.17	290	357	VERTICAL	Peak
4	2414.070	32.50	68.32	-35.82	60.00	-27.50	288	360	VERTICAL	Average
5	3192.110	31.69	66.88	-35.19	60.00	-28.31	300	44	VERTICAL	Average
6	3193.240	48.42	83.61	-35.19	80.00	-31.58	298	41	VERTICAL	Peak

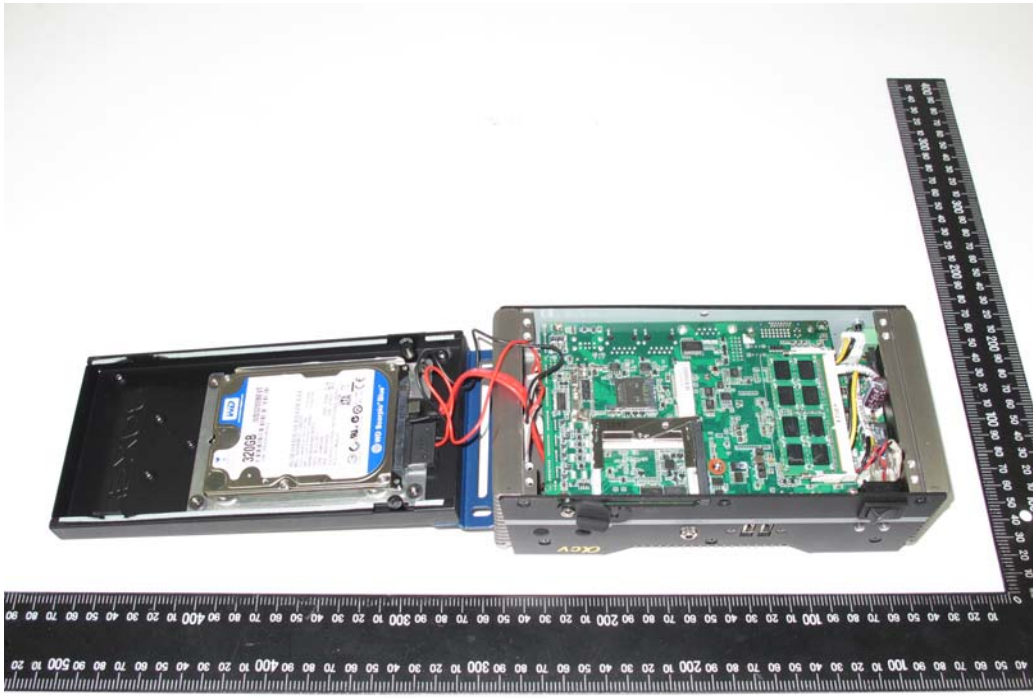
Note:
1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.

Attachment 1
Photographs of EUT


COM2
COM3
COM4
USB
LAN1
LAN2
COM1
VGA
V-
V+
DC


αcv
SYS
HDD
USB
LINE OUT
CFD


αcv



Power Adapter

FSP FSP060-DBAB1


FSP GROUP INC.
全漢企業股份有限公司
全汉企业股份有限公司
AC/DC Adapter(직류전원장치)
電源供應器/电源适配器
MODEL NO.(모델명) 型號/型号:FSP040-DGAA1
AC INPUT(交流輸入/交流输入):
100-240V~, 1.3A, 50-60Hz
DC OUTPUT(直流輸出/直流输出):
12.0V ⎓ 3.33A MAX (40W MAX)
CAUTION/주의사항 : 警告!
FOR INDOOR USE ONLY.
(室內使用/户内使用)
For use with information
Technology Equipment.
(適用於資訊類產品/适用於资讯类产品)
본 제품은 실내용이며,IT제품에 사용하십시오.
ATTENTION:
Nur innerhalb von Gebäuden benutzen.
Nur zur Verwendung mit
informationstechnischen Einrichtungen.
N136
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
JET
AR46
LISTED
I.T.E. POWER SUPPLY
L.P.S.
E190414
SAFETY
R43001
EFFICIENCY LEVEL: V
RoHS
KTC
HU10142-10048
A/S: +82-2-571-6680
Made in China - Zhonghan Electronics(Shenzhen) Co., Ltd.
MADE IN CHINA(中國製造/中国制造) 6LL0824702GP YL

CF Card


INNODISK
CFast
DI50Q
INDUSTRIAL
0 10 20 30 40 50 60 mm

Attachment 2
Modifications of EUT

Statement of the EUT Modifications

According to the rules of ANSI C63.4-2003 clause 10.1.13, the following equipment (EUT):

Product	:	Fanless embedded controller
Model No.	:	xxxxxAEC-6613-xxxxxxxx (Where x is 0-9，A-Z，-or blank) for marketing purpose
Manufacturer	:	AAEON Technology Inc.
Address	:	5F, NO.135, Lane 235, Pao Chiao Rd. Hsin-Tien Dist, New Taipei City, Taiwan, R.O.C

☐ should be **without** any modifications made

☐ should be **with** some modifications made

to bring the EUT into compliance with the appropriate specifications (47CFR Part 15, Subpart B). If any, the details of the modifications including the complete descriptions, reasons and so on are described in next page of this report.

We , **AAEON Technology Inc.** hereby ensure that the product specified above will have all of the modifications incorporated in the product when manufactured and placed on the market.

The following importer or manufacturer is responsible for this statement:

Company Name : _____

Company Address : _____

Telephone : _____ E-mail : _____

Legal Signature of the responsible personal:

_____ _____

Title / Name (full name) Date

The details of the modifications:

Item	Solution Component	Specifications	Manufacturer	Quantity	Reasons
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

If needed, some modification items are shown in the photographs in the following.