APPLICATION FOR CERTIFICATION
On Behalf of

SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd

Mother Board

Model Number: Giada MI-ION2

FCC ID: YIKMIION2

Prepared for : SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd
2/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China P. R

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number	:	ACS-F10297
Date of Test	:	Oct.14~21, 2010
Date of Report	:	Oct.22, 2010

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	: SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd
Manufacturer	: CHEER ASCENT Electronics Co., Ltd
EUT Description	: Mother Board
FCC ID	: YIKMIION2
(A)MODEL NO.	: Giada MI-ION2
(B)SERIAL NO.	: N/A
(C)POWER SUPPLY	: Power by PC System
(D)TEST VOLTAGE	: AC 120V/60Hz (Via PC System)

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2008, ANSI C63.4-2009

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B limits for radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Oct.14~21, 2010 Report of date: Oct.22,2010

Prepared by : Annie Wu
Annie Wu/ Supervisor

Reviewer by : Jamy Yu
Jamy Yu / Supervisor

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: Ken Lu 10/9/10

Approved & Authorized Signer :
Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Power Line Conducted Emission Test	FCC Part 15: 2008 ANSI C63.4: 2009	Class B	PASS
Radiated Emission Test	FCC Part 15: 2008 ANSI C63.4: 2009	Class B	PASS

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product name	:	Mother Board （Note）
Model Number	:	Giada MI-ION2
FCC ID	:	YIKMIION2
Highest clock frequency	:	1800MHz
Applicant	:	SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd 2/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China P.R
Manufacturer	:	CHEER ASCENT Electronics Co., Ltd Block 1, Fuhai Industrial Park, Fuyong town, Baoan District, Shenzhen, China P.R
Date of Test	:	Oct.14~21, 2010
Date of Receipt	:	Oct.12, 2010
Sample Type	:	Series production

Note: This EUT is Class B personal computer main board, for test purpose, a typical Class B personal computer was configured by applicant with this EUT.

2.2. Test configuration with EUT

CPU	atom D525@1.8GHz (integrated with EUT)
RAM	SO-DIMM HYNIX DDR2 800 2G HYMP
Hard disk	Seagate Barracuda 7200.12 SATA2 320G 3.5"
Power supply	Huntkey HK400-55AP 300W

A special PC test software “BurnInTest.exe” was used to exercise all functions of PC (full efficiency running of CPU, read and write data from Hard disk, output “H” character, the video resolution was set at 1920x1200@60Hz(which is worse case) ,all output and input port of EUT were also exercised by typical accessories)

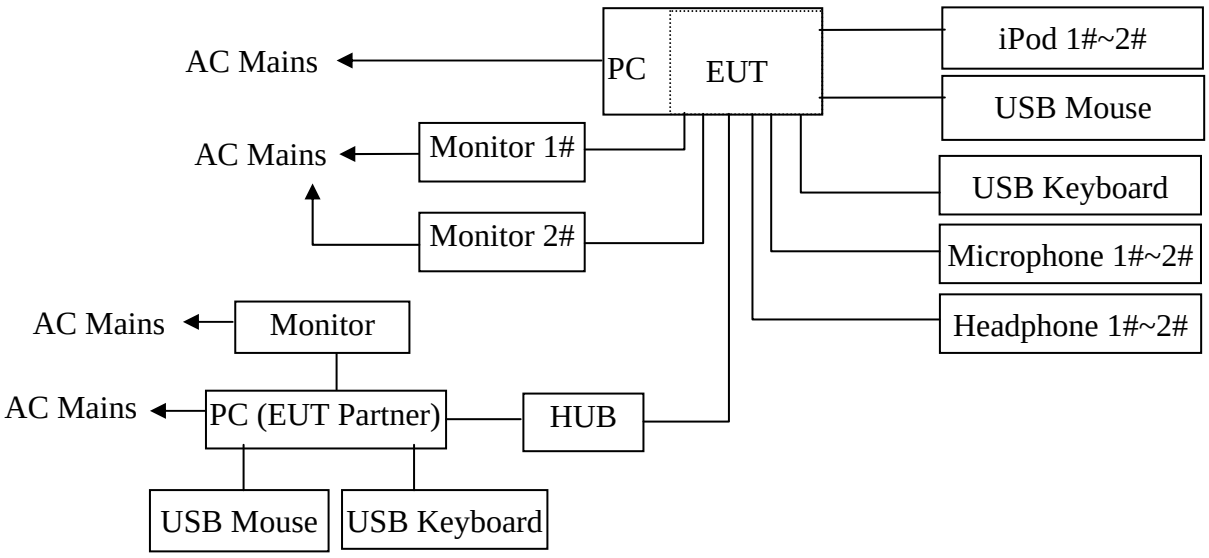
2.3.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	USB Mouse	ACS-EMC-M07R	DELL	M-UARDEL7	HS852130JEH	☑FCC DoC ☑BSMI ID: T41126
		Power Cord: shielded, Undetachable, 2.0m				
2.	USB Keyboard	ACS-EMC- K03R	DELL	SK-8115	CN-ODJ313-716 16-711-04WJ	☑ FCC DoC ☑BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				
3.	LCD Monitor	ACS-EMC-LM05R	DELL	2407WFPb	CN-0YY528-466 33-764-1TCS	☑FCC DoC ☑BSMI ID: R43002
		Power Cord: Unshielded, Detachable, 1.8m DVI Cable: Shielded, Detachable, 2.0m (with two cores)				
4	LCD Monitor	ACS-EMC-LM07R	DELL	3008WFPt	CN-0RW915-716 18-846-397L	☑FCC DoC ☑BSMI ID: R3A002
		Power Cord: Unshielded, Detachable, 1.8m HDMI Cable: Shielded, Detachable, 2.0m				
5	Headphone	ACS-EMC-EP01	OVANN	OV880V	N/A	☐FCC ID ☐BSMI ID
		Cable: Shielded, Undetachabled, 4.0m				
6	Headphone	ACS-EMC-EP02	OVANN	OV880V	N/A	☐FCC ID ☐BSMI ID
		Cable: Shielded, Undetachabled, 4.0m				
7	Microphone	ACS-EMC-MIC01	SONCN	SM-300	N/A	☑FCC DoC ☐BSMI ID
		Cable: Shielded, Undetachabled, 1.7m				
8	Microphone	ACS-EMC-MIC02	SONCN	SM-300	N/A	☑FCC DoC ☐BSMI ID
		Cable: Shielded, Undetachabled, 1.7m				
9	iPod nano	ACS-EMC-IP01	APPLE	A1199	YM706MLDVQ 5	☑FCC DoC ☑BSMI ID: R33057
		Data Cable: Shielded, Detachabled, 1.0m				
10	iPod nano	ACS-EMC-IP02	APPLE	A1199	YM706MCQVQ 5	☑FCC DoC ☑BSMI ID: R33057
		Data Cable: Shielded, Detachabled, 1.0m				

【PC system which transmitting 】

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC N	DELL	Studio 540	J14XK2X	☑FCC DoC ☑BSMI ID:R33002
		Power Cord: Unshielded, Detachable, 1.8m LAN Cable: Unshielded, Detachable, 10m Display Card: HD3650 (DVI+Display+HDMI)				
2.	USB Keyboard	ACS-EMC- K02R	DELL	SK-8115	CN-ORH656-658 90-686-007J	☑ FCC DoC ☑BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				
3.	USB Mouse	ACS-EMC-M02R	DELL	M056UO	512024264	☑FCC DoC ☑BSMI ID: R41108
		Power Cord: shielded, Undetachable, 1.8m				
4.	Monitor	ACS-EMC-LM04R	DELL	1907FPt	CN-009759-71618 -6AP-ACPP	☑FCC DoC ☑BSMI ID: R3A002
		Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m				

2.4.Block Diagram of connection between EUT and simulators



(EUT: Mother Board)

2.5.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Mar. 31, 2009 File on Federal Communication Commission Registration Number: 90454
3m & 10m Anechoic Chamber	:	Dec. 30, 2009 File on Federal Communication Commission Registration Number: 794232
EMC Lab.	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Feb. 02, 2009 Accredited by NVLAP, USA NVLAP Code: 200372-0 Apr.01, 2010

2.6.Test Uncertainty (95% confidence levels, k=2)

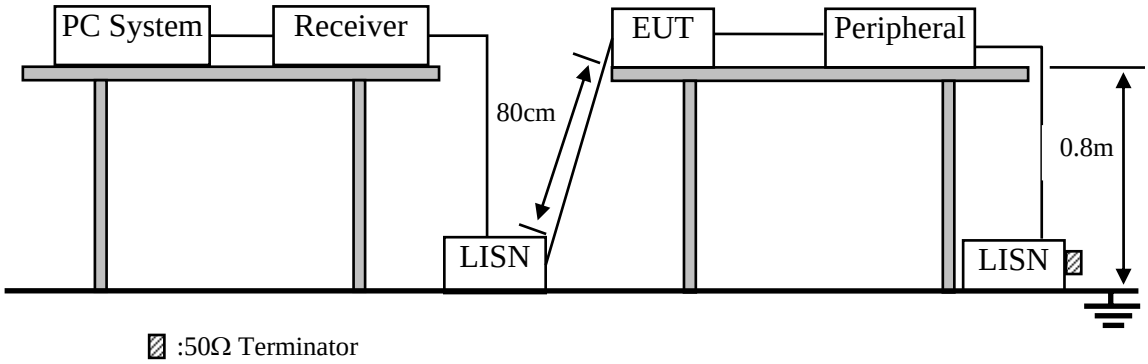
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 2 Conduction	3.48 dB
Uncertainty for Radiation Emission test in 10m chamber (Distance: 10m)	4.86dB (30~200MHz, Polarize: H)
	4.98dB (30~200MHz, Polarize: V)
	5.10dB (200M~1GHz, Polarize: H)
	4.98dB (200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 10m chamber (1GHz-18GHz)	3.12 dB (Distance: 3m Polarize: V)
	3.74 dB (Distance: 3m Polarize: H)
Uncertainty for SVSWR in 10m Chamber	2.42 dB (Distance: 3m Polarize: V)
	2.44 dB (Distance: 3m Polarize: H)
Uncertainty for test site temperature and humidity	0.3℃
	2%

3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	Rohde & Schwarz	ESCI	100843	Mar.30, 10	1 Year
2	L.I.S.N.#1	Rohde & Schwarz	ENV4200	100041	May.08, 10	1 Year
3	L.I.S.N.#2	Kyoritsu	KNW-407	8-1628-5	May.08, 10	1 Year
4	Terminator	Hubersuhner	50Ω	No. 2	May.08, 10	1 Year
5	RF Cable	Fujikura	3D-2W	LISN Cable 2#	May.08, 10	1 Year
6	Coaxial Switch	Anritsu	MP59B	6200298346	May.08, 10	1 Year
7	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100340	May.08, 10	1 Year

3.2.Block Diagram of Test Setup



▨ :50Ω Terminator

3.3.Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Mother Board (EUT)

Model Number : Giada MI-ION2
Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software “BurnInTest.exe” to exercise all functions of EUT

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4-2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test results are reported and test results for Conducted Disturbance Test on Section 3.7.

3.7.Power Line Conducted Emission Test Results

PASS. **(**All emissions not reported below are too low against the prescribed limits.)

EUT: Mother Board Model No. : Giada MI-ION2

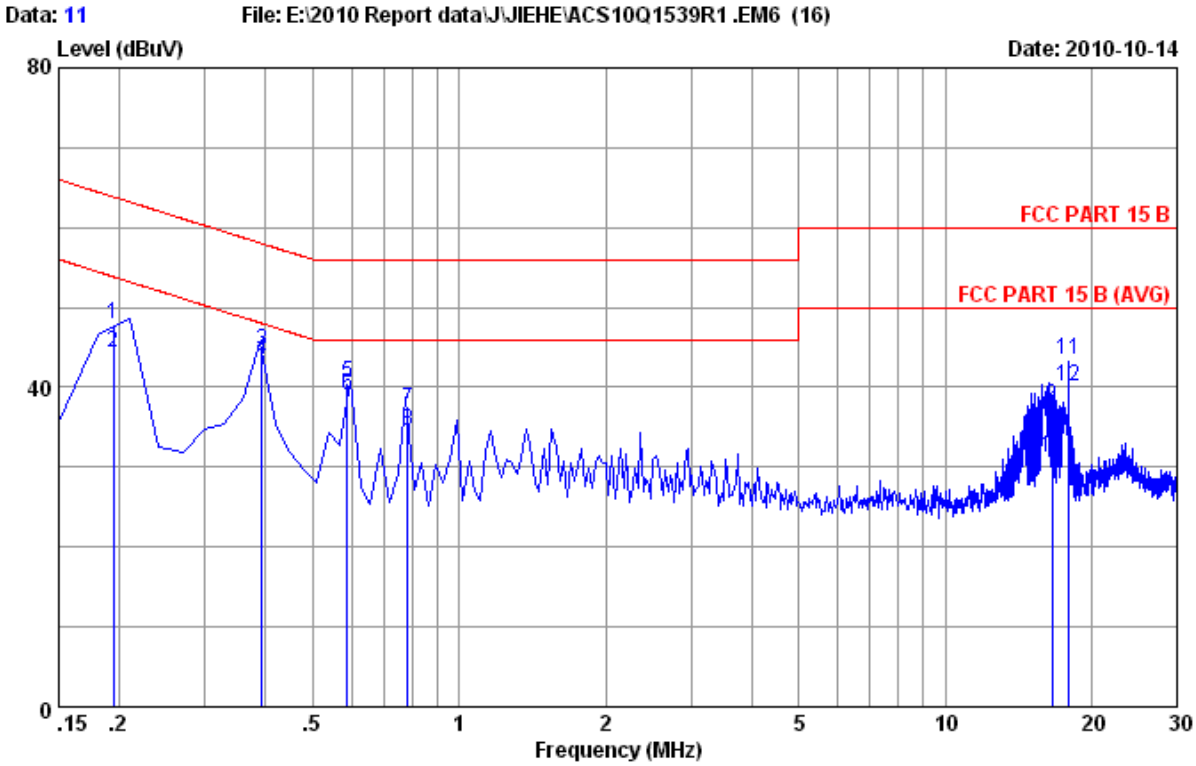
The EUT with the following test modes were tested and selected to read Q.P values, all the test results are listed in next pages.

Test Date: Oct.21, 2010 Temperature: 24℃ Humidity: 56%

The details of test modes are as follows：

No.	Test Mode
1	HDMI+DVI **1920*1200/60Hz**

(※ Worst test mode)



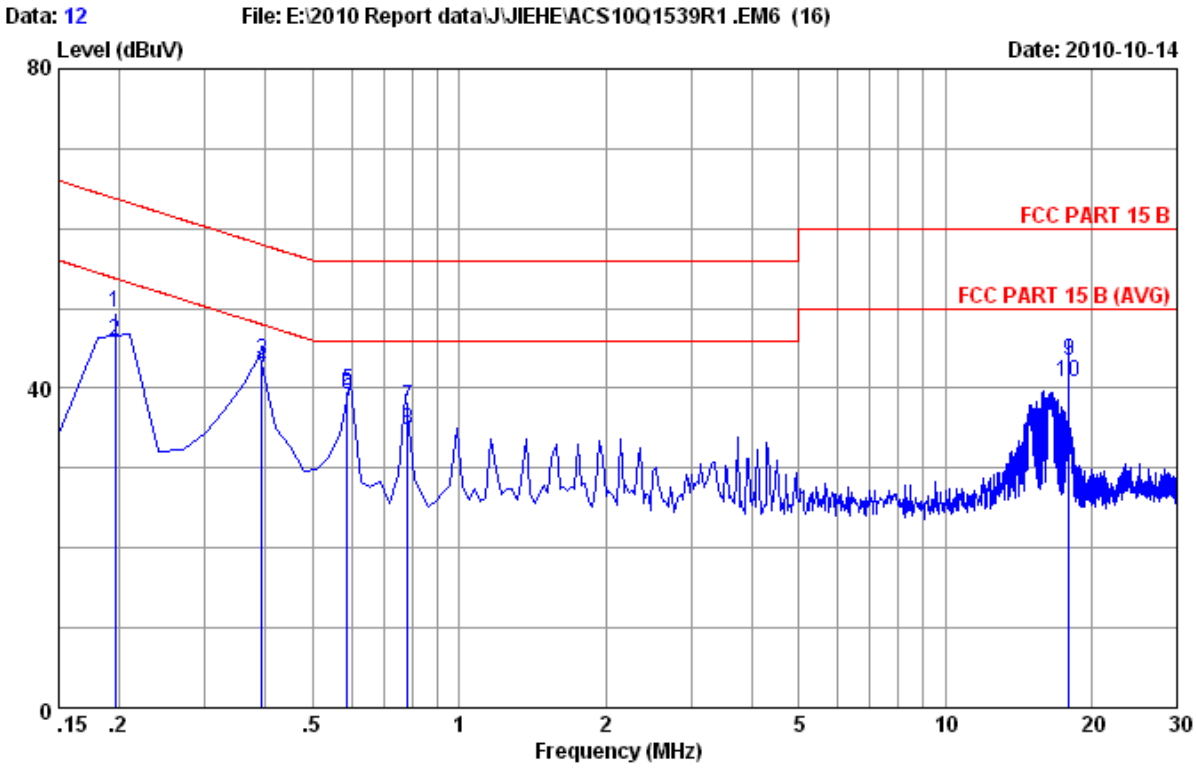
Site no :Audix No.2 Conduction
Dis./Ant. :** 2010 ENV4200
Limit :FCC PART 15 B
Env./Ins. :29.5*C/55%
EUT :Motherboard M/N:Giada MI-ION2
Power Rating :AC 230V/50Hz
Test Mode :Running BurnInTest v5.3
HDMI+DVI:1920*1200@60Hz

Data No :11
LISN phase:LINE

Engineer :Restar

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19400	10.14	9.87	27.90	47.91	63.86	15.95	QP
2	0.19400	10.14	9.87	24.30	44.31	53.86	9.55	Average
3	0.39200	10.17	9.88	24.60	44.65	58.02	13.37	QP
4	0.39200	10.17	9.88	23.50	43.55	48.02	4.47	Average
5	0.58900	10.15	9.88	20.60	40.63	56.00	15.37	QP
6	0.58900	10.15	9.88	18.90	38.93	46.00	7.07	Average
7	0.78400	10.14	9.89	17.29	37.32	56.00	18.68	QP
8	0.78400	10.14	9.89	14.49	34.52	46.00	11.48	Average
9	16.610	10.39	10.51	16.80	37.70	60.00	22.30	QP
10	16.610	10.39	10.51	10.20	31.10	50.00	18.90	Average
11	17.940	10.38	10.57	22.60	43.55	60.00	16.45	QP
12	17.940	10.38	10.57	19.10	40.05	50.00	9.95	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :Audix No.2 Conduction
Dis./Ant. :** 2010 ENV4200
Limit :FCC PART 15 B
Env./Ins. :29.5*C/55%
EUT :Motherboard M/N:Giada MI-ION2
Power Rating :AC 230V/50Hz
Test Mode :Running BurnInTest v5.3
HDMI+DVI:1920*1200@60Hz

Data No :12
LISN phase:NEUTRAL
Engineer :Restar

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.19600	10.18	9.87	29.40	49.45	63.78	14.33	QP
2	0.19600	10.18	9.87	25.90	45.95	53.78	7.83	Average
3	0.39200	10.19	9.88	23.49	43.56	58.02	14.46	QP
4	0.39200	10.19	9.88	22.59	42.66	48.02	5.36	Average
5	0.58800	10.17	9.88	19.60	39.65	56.00	16.35	QP
6	0.58800	10.17	9.88	19.10	39.15	46.00	6.85	Average
7	0.78300	10.17	9.89	17.50	37.56	56.00	18.44	QP
8	0.78300	10.17	9.89	14.60	34.66	46.00	11.34	Average
9	17.950	10.53	10.57	22.40	43.50	60.00	16.50	QP
10	17.950	10.53	10.57	19.70	40.80	50.00	9.20	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

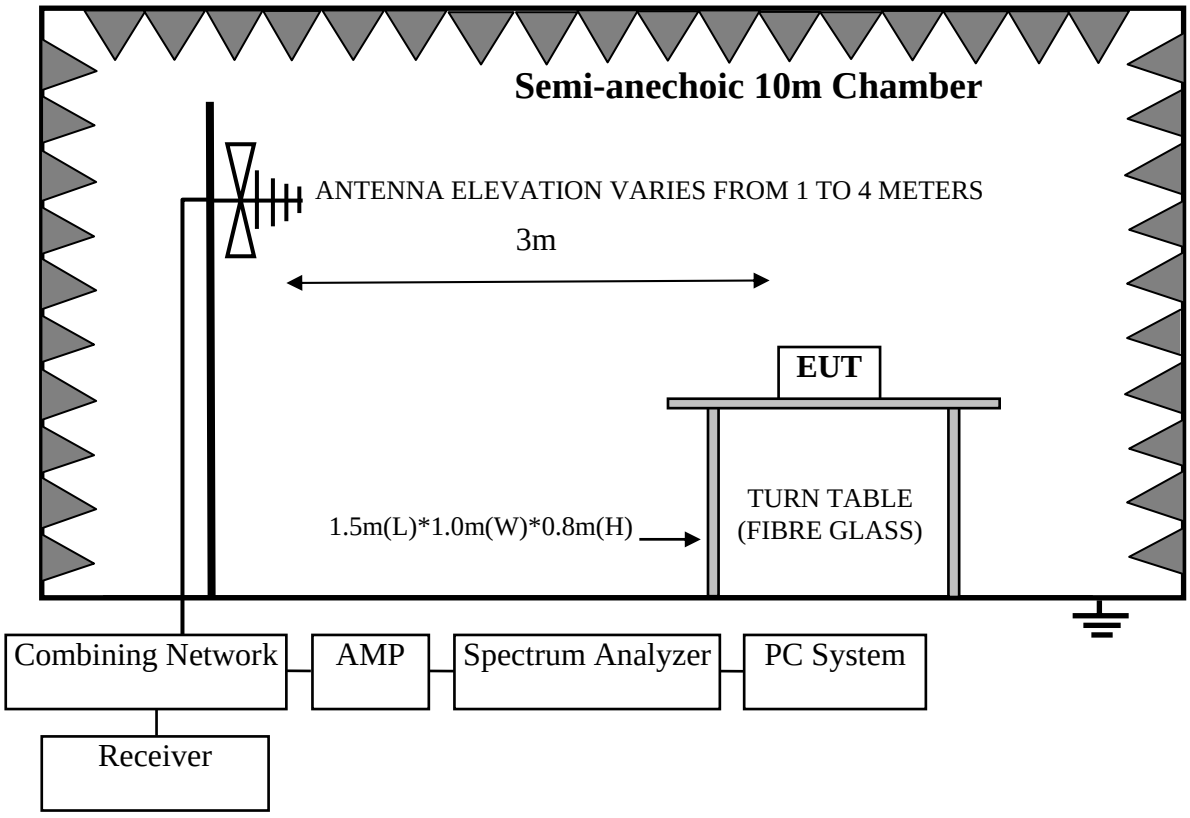
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	10m Chamber	AUDIX	N/A	N/A	Dec.05,09	1 Year
2	EMC Analyzer	Agilent	E7405A	MY42000131	May.08, 10	1 Year
3	EMC Analyzer	Agilent	E7405A	MY45116588	May.08, 10	1 Year
4	Test Receiver	Rohde & Schwarz	ESCI	100842	May.08, 10	1 Year
5	Amplifier	Agilent	8447D	2944A10684	May.08, 10	1Year
6	Amplifier	Agilent	8447D	2944A11140	May.08, 10	1 Year
7	Bilog Antenna	Schaffner	CBL6112D	25238	Mar.27, 10	1 Year
8	Bilog Antenna	Schaffner	CBL6112D	25237	Mar.27, 10	1 Year
9	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.1	May.08, 10	1 Year
10	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.2	May.08, 10	1 Year
11	Coaxial Switch	Anritsu	MP59B	6200766906	May.08, 10	1 Year
12	Coaxial Switch	Anritsu	MP59B	6200766905	May.08, 10	1 Year
13	Coaxial Switch	Anritsu	MP59B	6200313662	May.08, 10	1 Year

Frequency rang: above 1000MHz

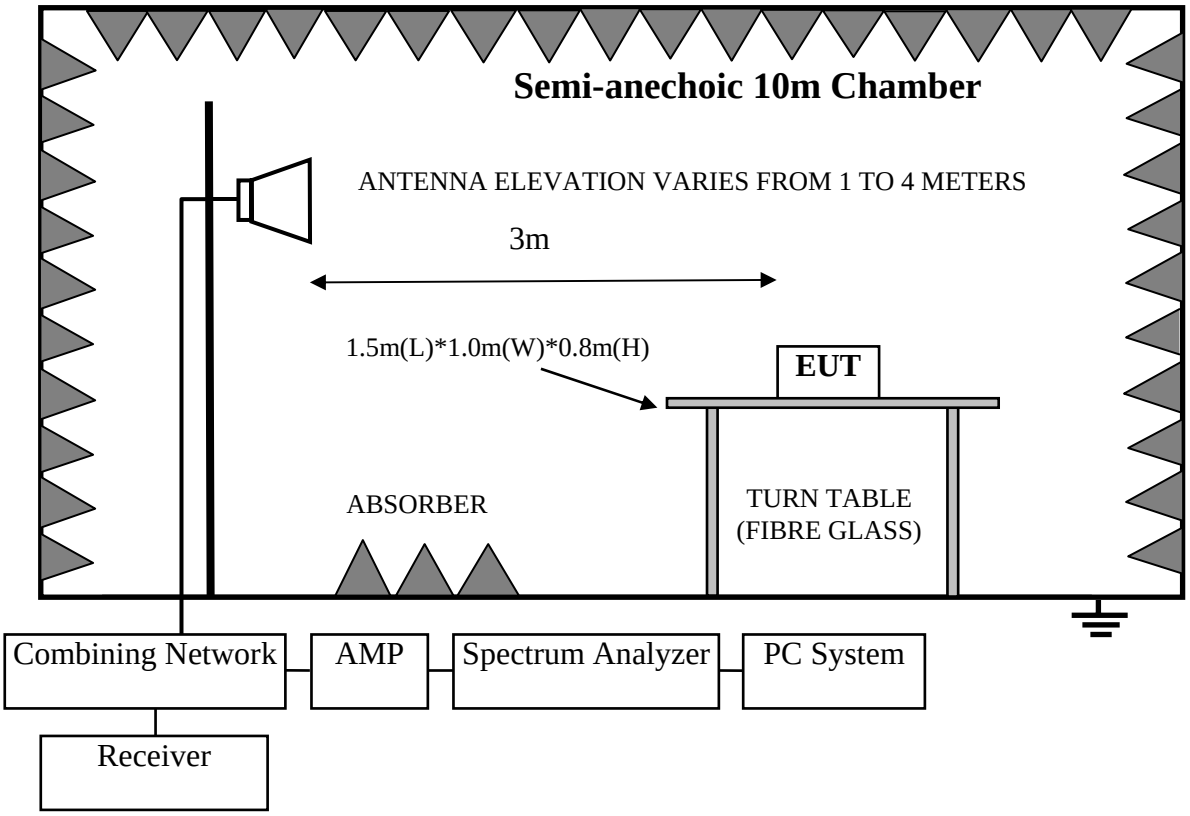
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 09	1.5 Year
3	Horn Antenna	EMCO	3116	00060089	Nov.25, 09	1.5 Year
4	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year
7	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,10	1 Year

4.2. Block Diagram of Test Setup

4.2.1. Anechoic Chamber Setup Diagram (30-1000MHz)



4.2.2. In Anechoic (10m) Chamber Test Setup Diagram for above 1GHz



4.3.Radiated Emission Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0
Above 1000	3	74(Peak)54(Average)

Remark**:** (1) Emission level = Antenna Factor + Cable Loss + Reading

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 5.2.

4.6.Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission Test.

According FCC Part15A:15.32 requirements, test was performed with device installed in a typical enclosure, and both with enclosure's cover removed and installed. Test also performed with enclosure in vertical and horizontal position.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

4.7.Radiated Emission Test Results

PASS.

EUT: Mother Board Model No. : Giada MI-ION2

The EUT with the following test modes were tested and selected to read Q.P values, all the test results are listed in next pages.

Test Date: Oct.21, 2010 Temperature: 24℃ Humidity: 56%

The details of test modes are as follows：

No.	Remark	Test Mode
1	Lie Low without cover	**1920*1200/60Hz**
2	Lie Low with cover	**1920*1200/60Hz**
3	Stand-up without cover	**1920*1200/60Hz**
4	Stand-up with cover	**1920*1200/60Hz**

(※ Worst test mode)

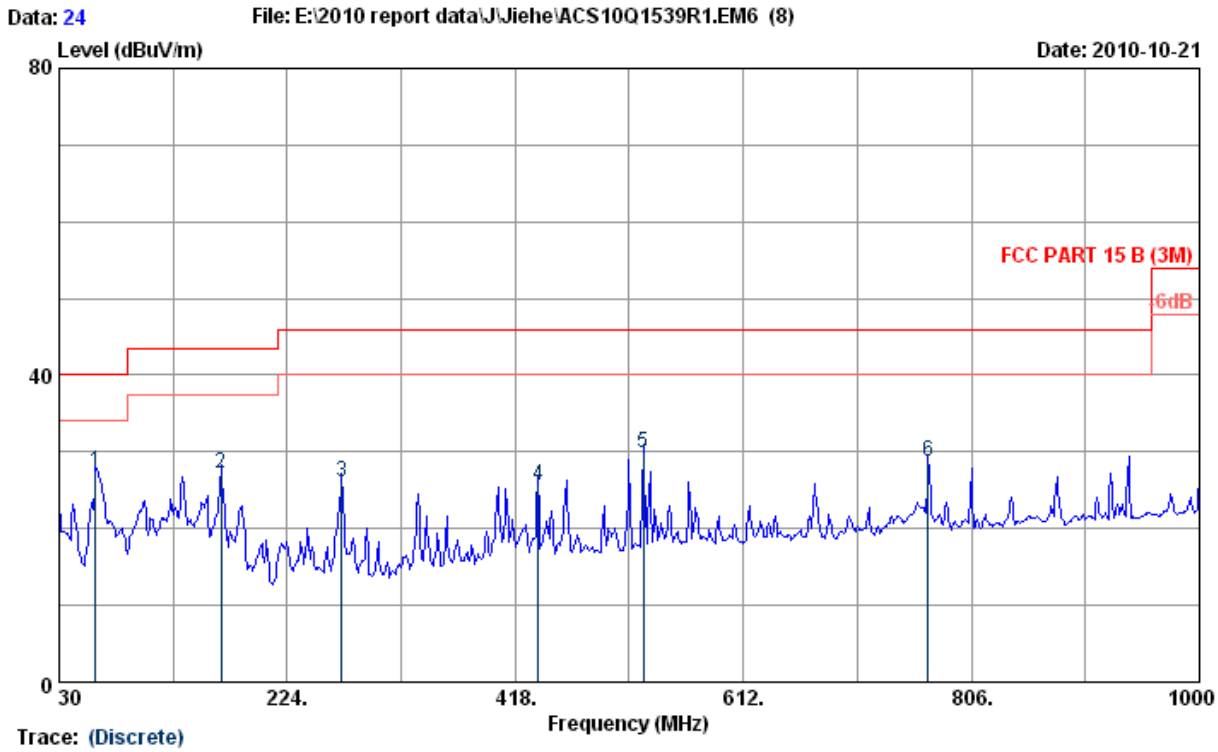
For frequency range 1GHz~10GHz

The EUT with below test modes were measured within Anechoic Chamber and the test results listed in next pages

Test Date: Oct.21, 2010 Temperature: 24℃ Humidity: 56%

No.	Remark	Test Mode
1	Lie Low without cover	**1920*1200/60Hz**
2	Lie Low with cover	**1920*1200/60Hz**
3	Stand-up without cover	**1920*1200/60Hz**
4	Stand-up with cover	**1920*1200/60Hz**

Test Frequency: 30MHz-1000MHz

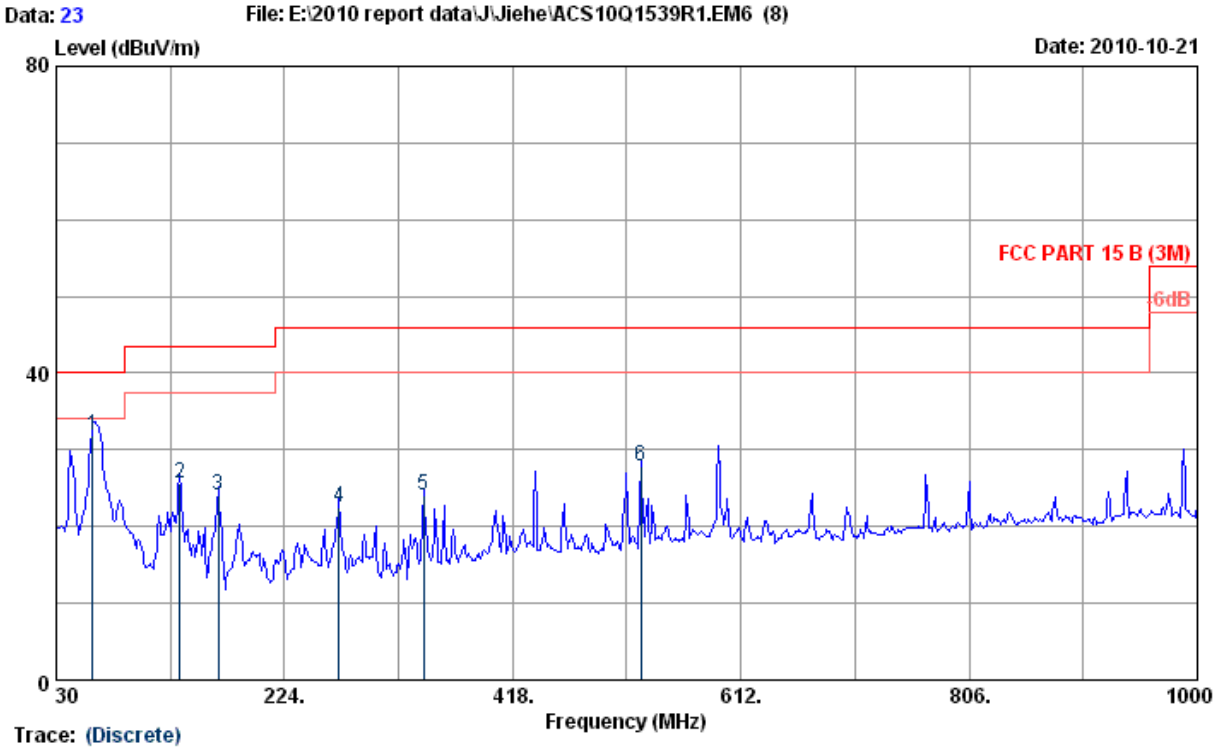


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 24
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Lie Low Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	61.040	6.52	1.08	19.79	27.39	40.00	12.61	QP
2	167.740	10.44	2.00	14.85	27.29	43.50	16.21	QP
3	270.560	13.42	2.82	9.89	26.13	46.00	19.87	QP
4	437.400	17.00	3.87	4.86	25.73	46.00	20.27	QP
5	526.640	18.10	4.31	7.48	29.89	46.00	16.11	QP
6	769.140	20.40	5.39	2.89	28.68	46.00	17.32	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

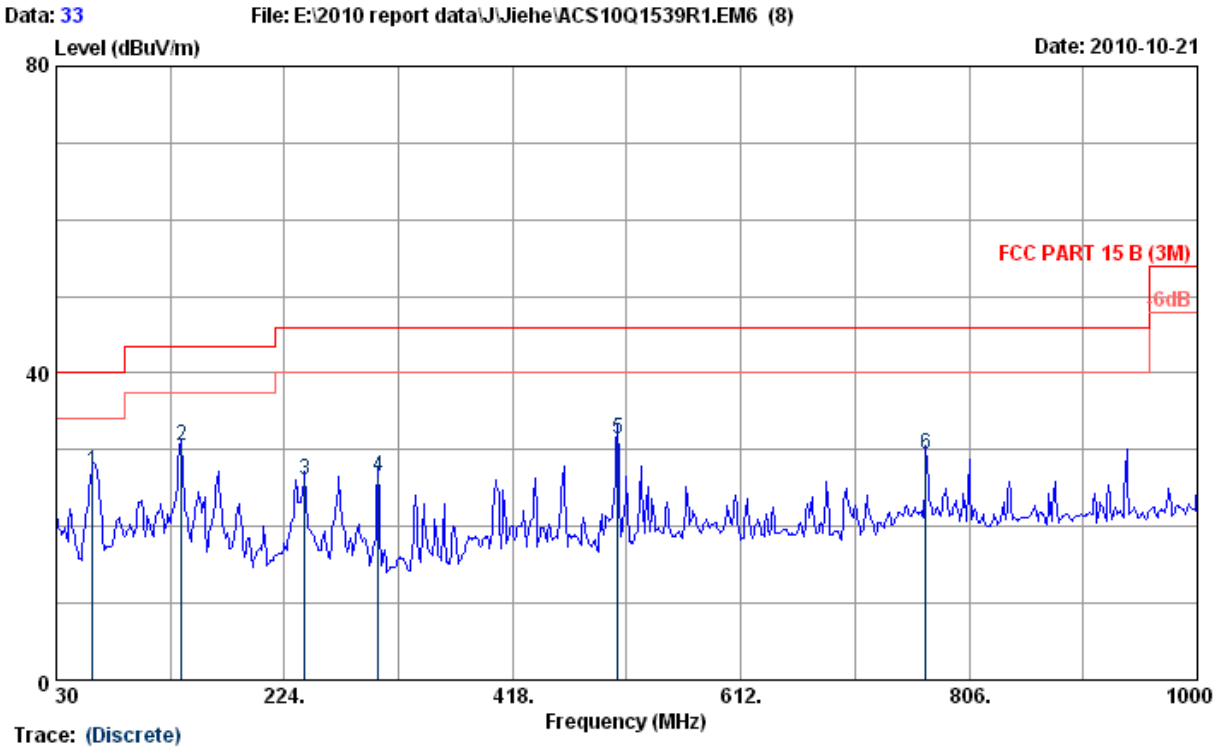


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 23
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Lie Low Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	61.040	6.52	1.08	24.23	31.83	40.00	8.17	QP
2	134.760	12.50	1.73	11.42	25.65	43.50	17.85	QP
3	167.740	10.44	2.00	11.67	24.11	43.50	19.39	QP
4	270.560	13.42	2.82	6.31	22.55	46.00	23.45	QP
5	342.340	14.98	3.32	5.70	24.00	46.00	22.00	QP
6	526.640	18.10	4.31	5.42	27.83	46.00	18.17	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

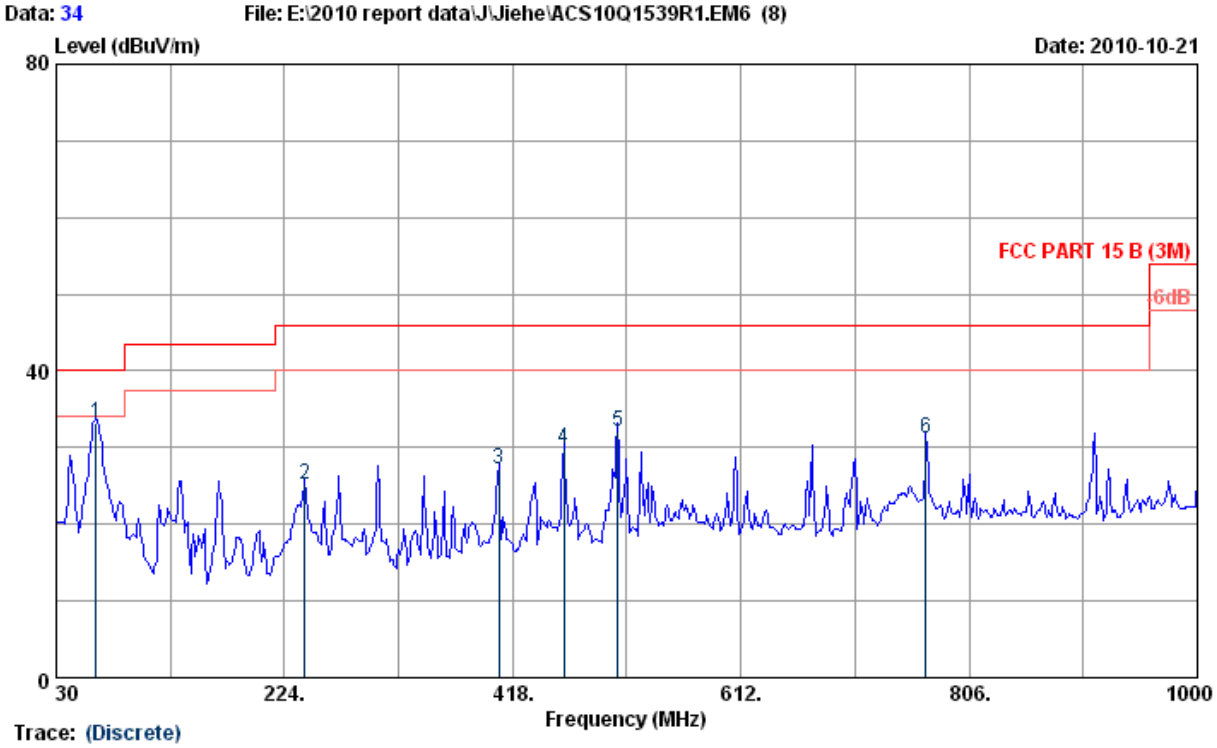


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 33
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Lie Low With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	61.040	6.52	1.08	19.69	27.29	40.00	12.71	QP
2	136.700	12.22	1.75	16.49	30.46	43.50	13.04	QP
3	241.460	12.27	2.59	11.22	26.08	46.00	19.92	QP
4	303.540	13.98	3.08	9.56	26.62	46.00	19.38	QP
5	507.240	17.98	4.21	9.29	31.48	46.00	14.52	QP
6	769.140	20.40	5.39	3.67	29.46	46.00	16.54	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

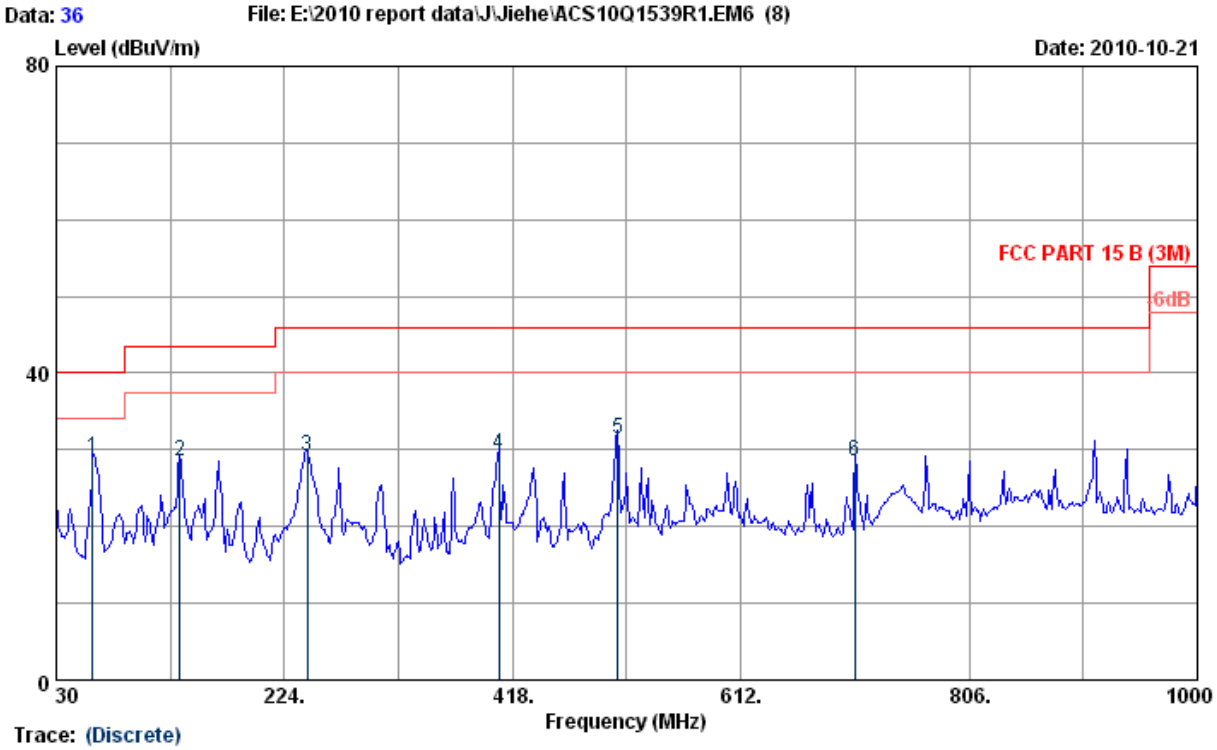


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 34
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Lie Low With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	63.950	6.58	1.11	25.41	33.10	40.00	6.90	QP
2	241.460	12.27	2.59	10.30	25.16	46.00	20.84	QP
3	406.360	16.96	3.71	6.41	27.08	46.00	18.92	QP
4	461.650	17.36	3.99	8.44	29.79	46.00	16.21	QP
5	507.240	17.98	4.21	9.96	32.15	46.00	13.85	QP
6	769.140	20.40	5.39	5.38	31.17	46.00	14.83	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

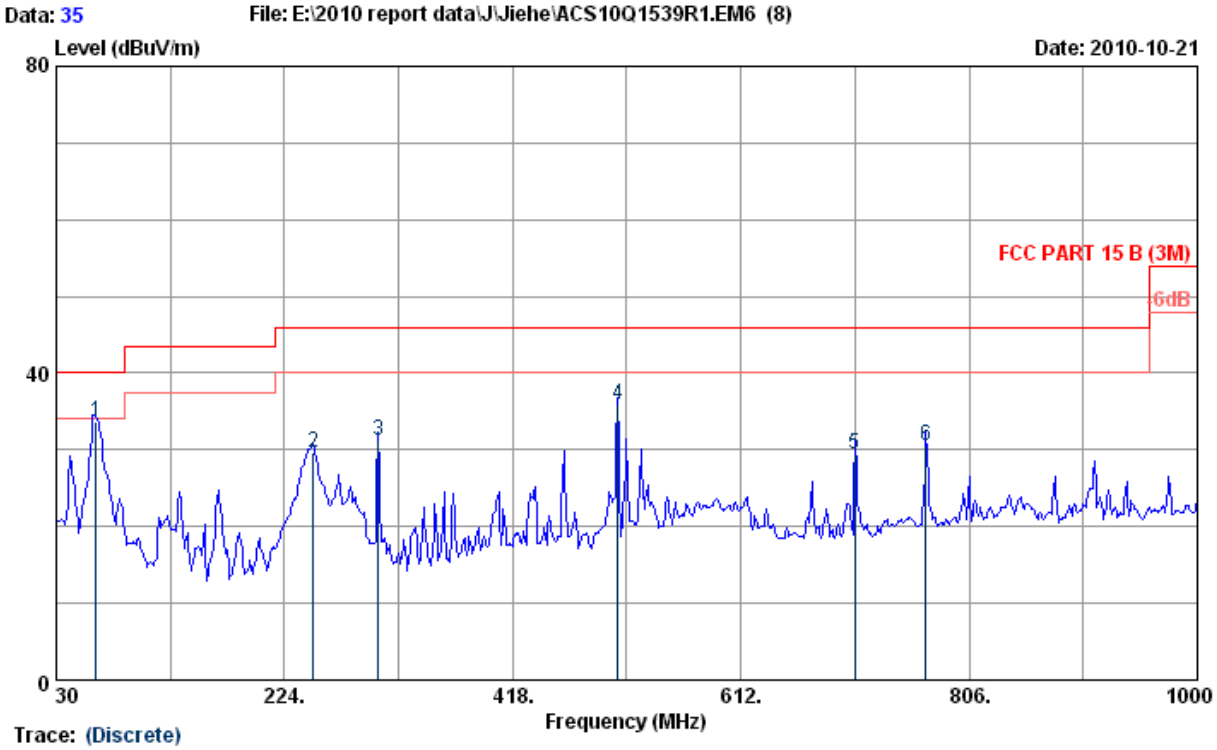


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 36
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Stand-up Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	61.040	6.52	1.08	21.32	28.92	40.00	11.08	QP
2	134.760	12.50	1.73	14.29	28.52	43.50	14.98	QP
3	243.400	12.41	2.60	14.17	29.18	46.00	16.82	QP
4	406.360	16.96	3.71	8.79	29.46	46.00	16.54	QP
5	507.240	17.98	4.21	9.24	31.43	46.00	14.57	QP
6	709.000	19.69	5.16	3.61	28.46	46.00	17.54	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

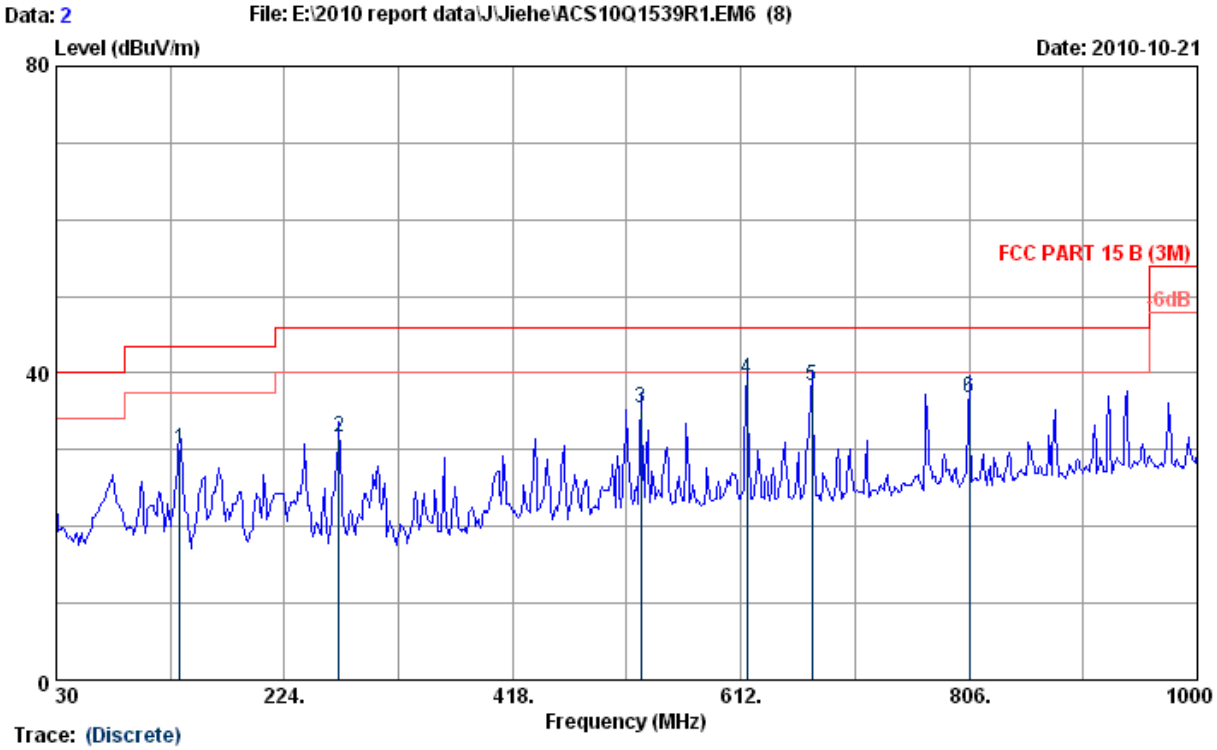


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 35
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Stand-up Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	63.950	6.58	1.11	25.91	33.60	40.00	6.40	QP
2	248.250	12.76	2.64	14.24	29.64	46.00	16.36	QP
3	303.540	13.98	3.08	14.17	31.23	46.00	14.77	QP
4	507.240	17.98	4.21	13.61	35.80	46.00	10.20	QP
5	709.000	19.69	5.16	4.47	29.32	46.00	16.68	QP
6	769.140	20.40	5.39	4.81	30.60	46.00	15.40	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

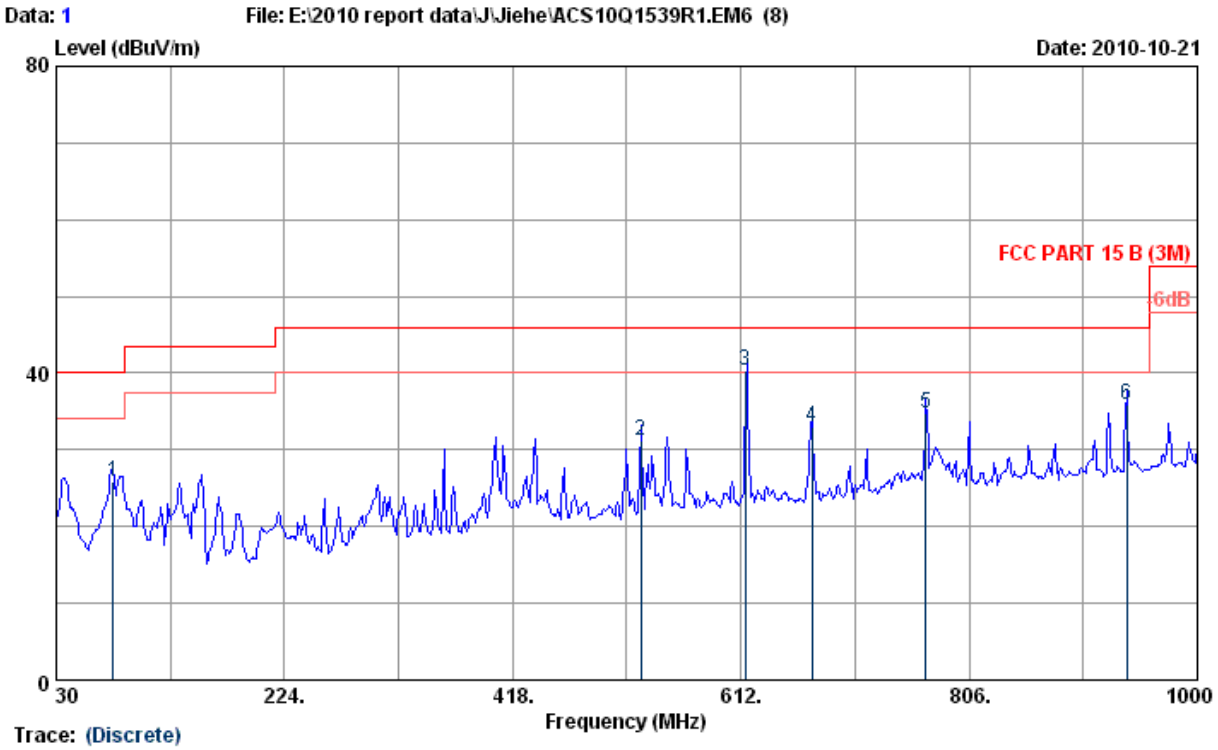


Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 2
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Stand-up With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	134.760	12.50	1.73	15.74	29.97	43.50	13.53	QP
2	270.560	13.42	2.82	15.45	31.69	46.00	14.31	QP
3	526.640	18.10	4.31	13.11	35.52	46.00	10.48	QP
4	616.850	19.24	4.74	15.13	39.11	46.00	6.89	QP
5	672.140	19.60	5.00	13.67	38.27	46.00	7.73	QP
6	806.000	20.70	5.54	10.52	36.76	46.00	9.24	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



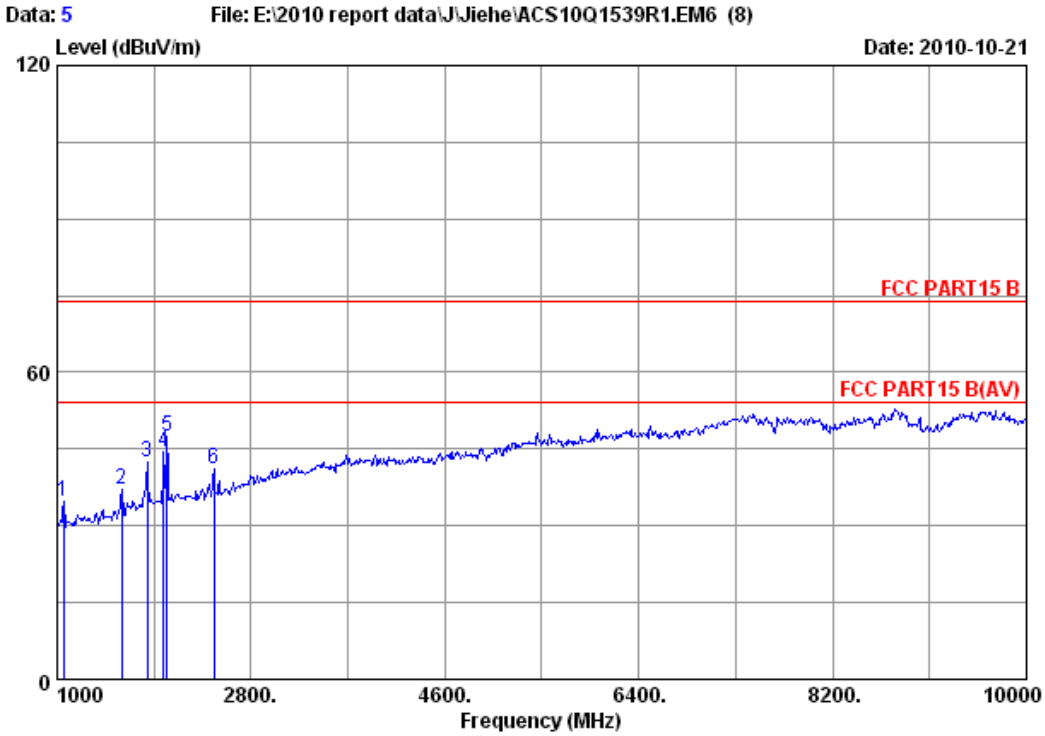
Trace: (Discrete)

Site no. : 10m Chamber Test Site Data No. : 1
Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24*C/56% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power Rating : AC 120V/60Hz
Test Mode : Running Burnin Test V5.3
DVI+HDMI:1920*1200@60Hz
Stand-up With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	78.500	7.44	1.26	17.10	25.80	40.00	14.20	QP
2	526.640	18.10	4.31	8.86	31.27	46.00	14.73	QP
3	616.000	19.22	4.73	16.30	40.25	46.00	5.75	QP
4	672.140	19.60	5.00	8.29	32.89	46.00	13.11	QP
5	769.140	20.40	5.39	9.06	34.85	46.00	11.15	QP
6	939.860	21.90	6.12	7.90	35.92	46.00	10.08	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

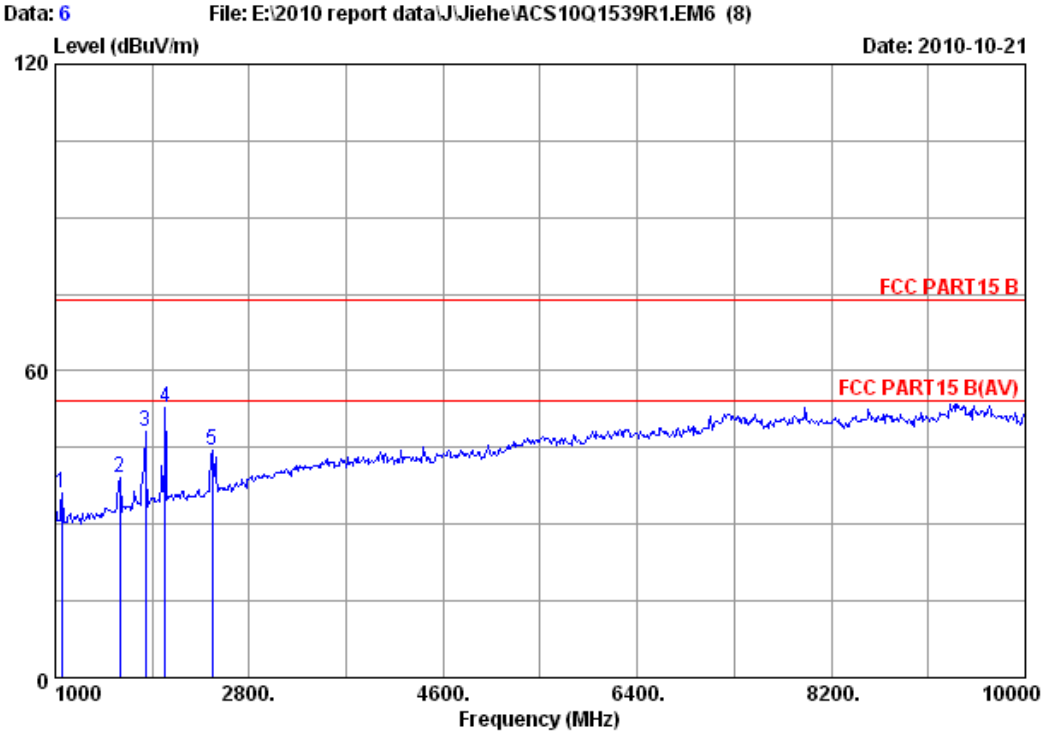
Test Frequency: Above 1GHz



Site no. : 10m Chamber Data no. : 5
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Lie Low Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	42.04	34.66	74.00	39.34	Peak
2	1603.000	26.96	5.91	36.94	41.02	36.95	74.00	37.05	Peak
3	1837.000	28.27	6.33	36.79	44.71	42.52	74.00	31.48	Peak
4	1990.000	29.11	6.63	36.70	45.47	44.51	74.00	29.49	Peak
5	2017.000	29.21	6.67	36.69	48.13	47.32	74.00	26.68	Peak
6	2458.000	29.48	7.50	36.61	40.65	41.02	74.00	32.98	Peak

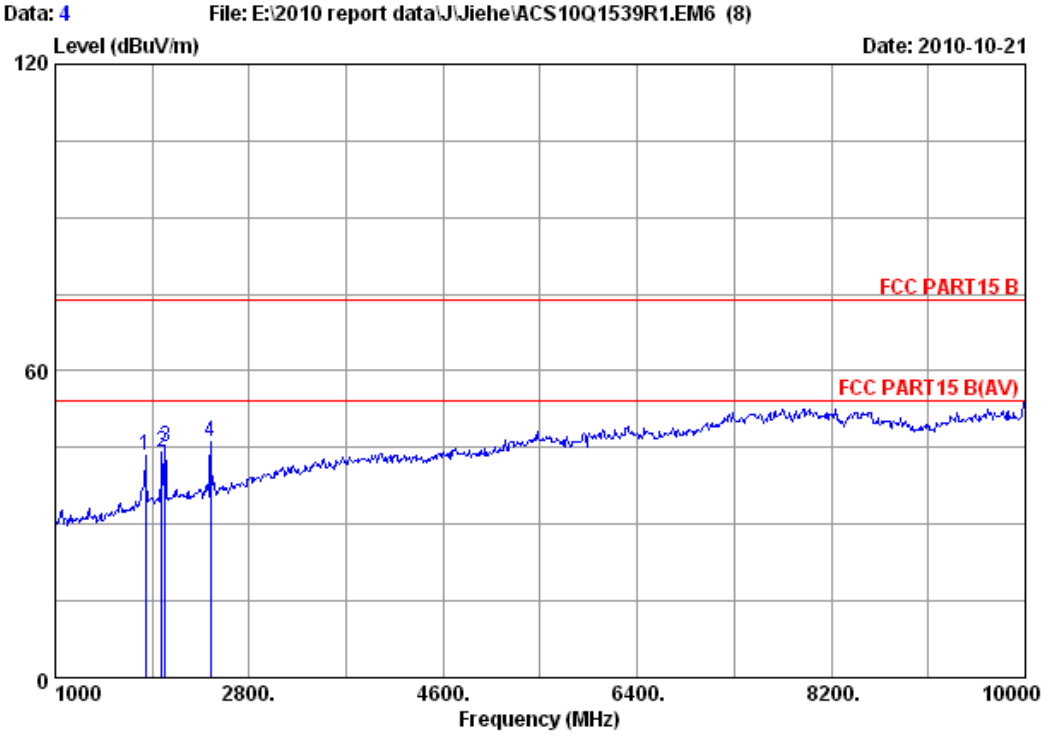
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 6
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Lie Low Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	43.44	36.06	74.00	37.94	Peak
2	1603.000	26.96	5.91	36.94	43.07	39.00	74.00	35.00	Peak
3	1837.000	28.27	6.33	36.79	50.24	48.05	74.00	25.95	Peak
4	2017.000	29.21	6.67	36.69	53.46	52.65	74.00	21.35	Peak
5	2458.000	29.48	7.50	36.61	44.21	44.58	74.00	29.42	Peak

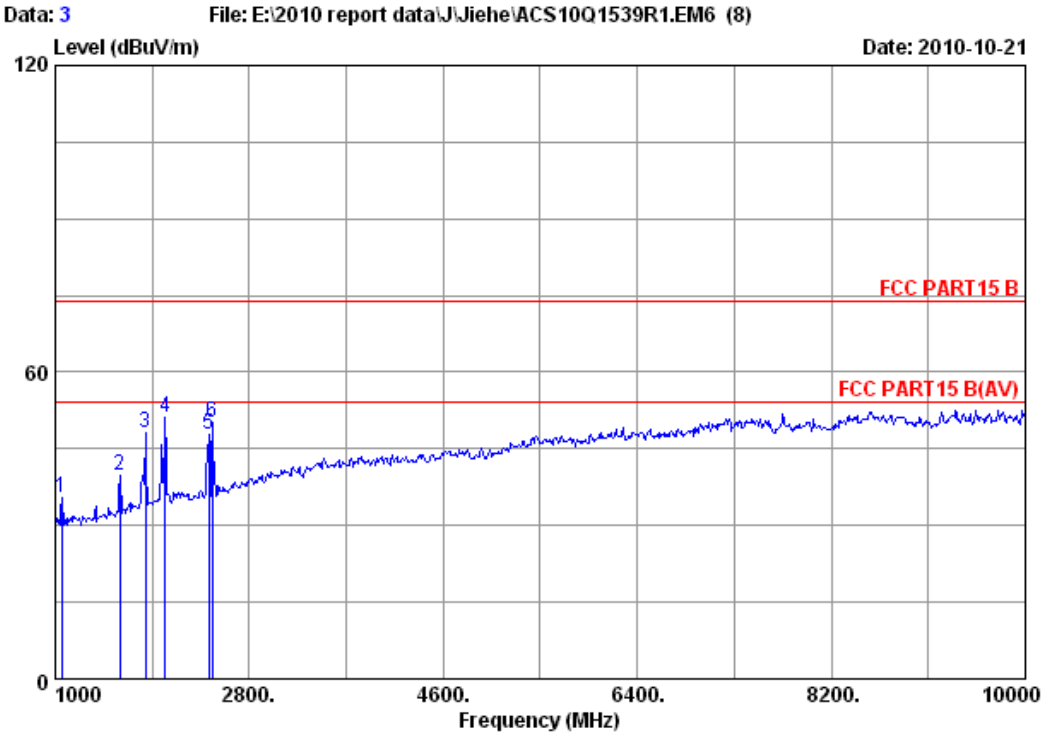
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 4
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Lie Low With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1837.000	28.27	6.33	36.79	45.63	43.44	74.00	30.56	Peak
2	1990.000	29.11	6.63	36.70	45.22	44.26	74.00	29.74	Peak
3	2017.000	29.21	6.67	36.69	46.00	45.19	74.00	28.81	Peak
4	2440.000	29.47	7.50	36.61	45.65	46.01	74.00	27.99	Peak

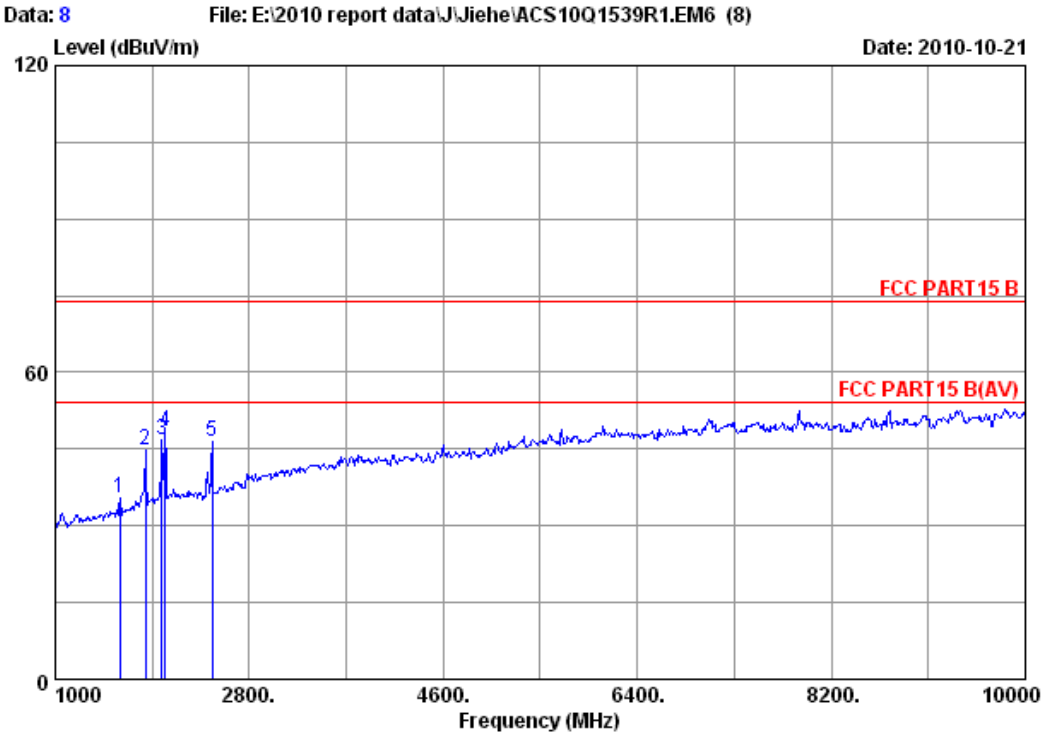
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 3
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Lie Low With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	42.72	35.34	74.00	38.66	Peak
2	1603.000	26.96	5.91	36.94	43.95	39.88	74.00	34.12	Peak
3	1837.000	28.27	6.33	36.79	50.25	48.06	74.00	25.94	Peak
4	2017.000	29.21	6.67	36.69	51.92	51.11	74.00	22.89	Peak
5	2422.000	29.46	7.46	36.61	47.42	47.73	74.00	26.27	Peak
6	2458.000	29.48	7.50	36.61	49.83	50.20	74.00	23.80	Peak

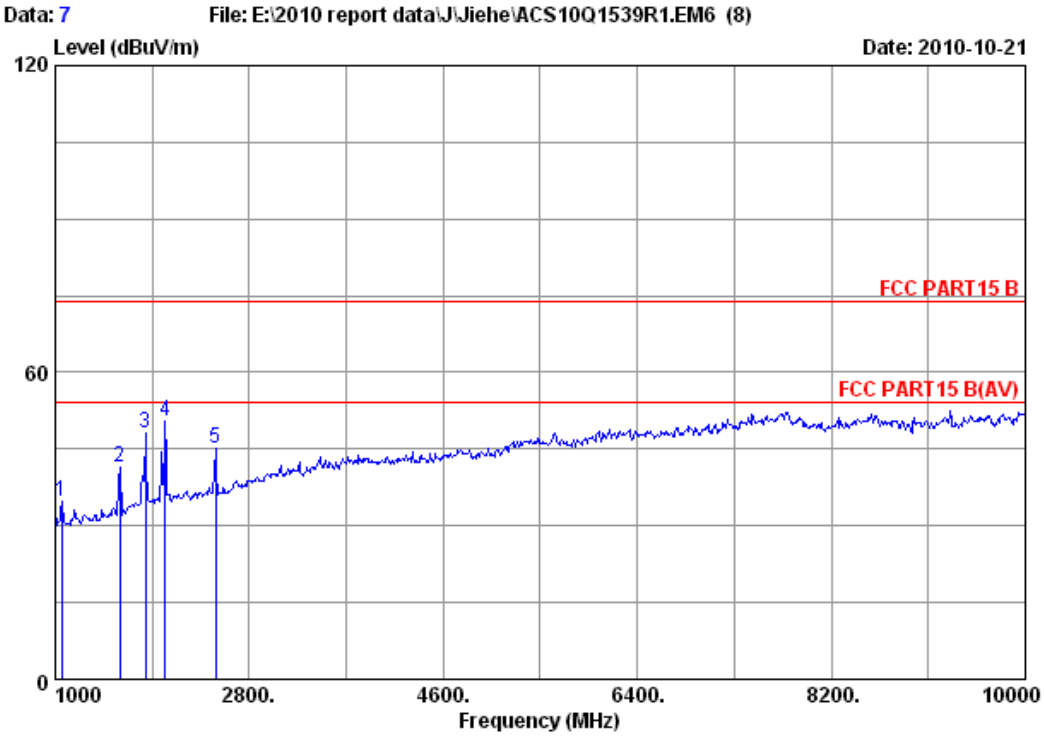
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 8
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Stand-up Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1603.000	26.96	5.91	36.94	39.45	35.38	74.00	38.62	Peak
2	1837.000	28.27	6.33	36.79	47.12	44.93	74.00	29.07	Peak
3	1990.000	29.11	6.63	36.70	47.73	46.77	74.00	27.23	Peak
4	2017.000	29.21	6.67	36.69	49.32	48.51	74.00	25.49	Peak
5	2458.000	29.48	7.50	36.61	46.14	46.51	74.00	27.49	Peak

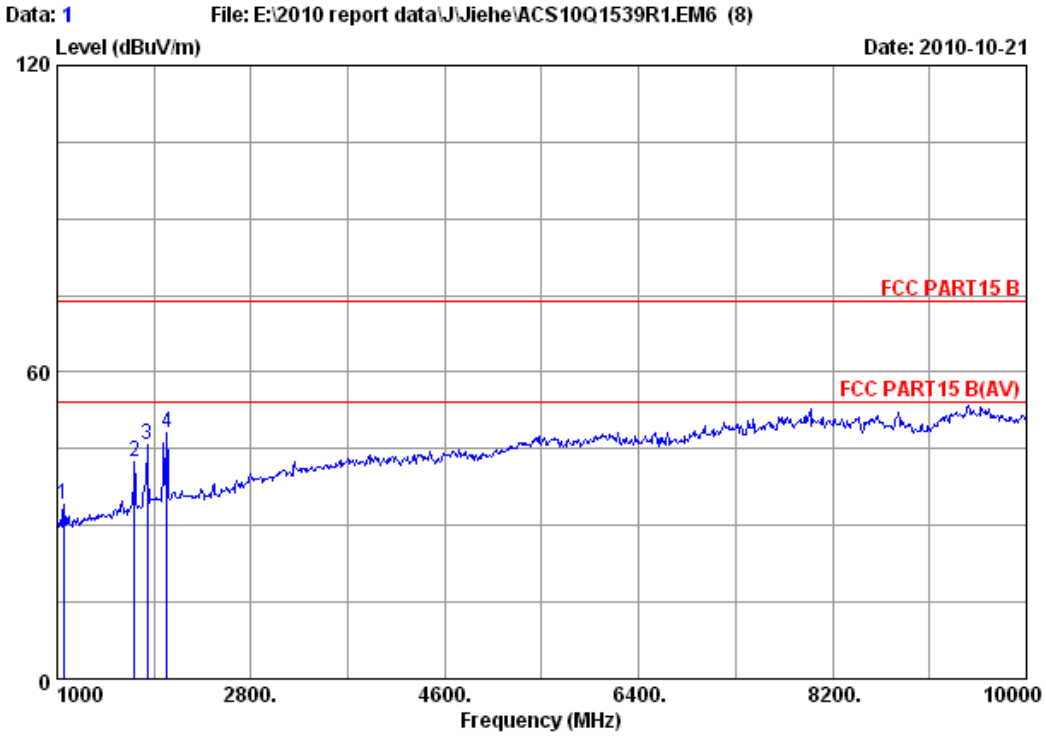
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 7
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Stand-up Without Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	42.23	34.85	74.00	39.15	Peak
2	1603.000	26.96	5.91	36.94	45.52	41.45	74.00	32.55	Peak
3	1837.000	28.27	6.33	36.79	50.41	48.22	74.00	25.78	Peak
4	2017.000	29.21	6.67	36.69	51.38	50.57	74.00	23.43	Peak
5	2485.000	29.49	7.58	36.60	44.54	45.01	74.00	28.99	Peak

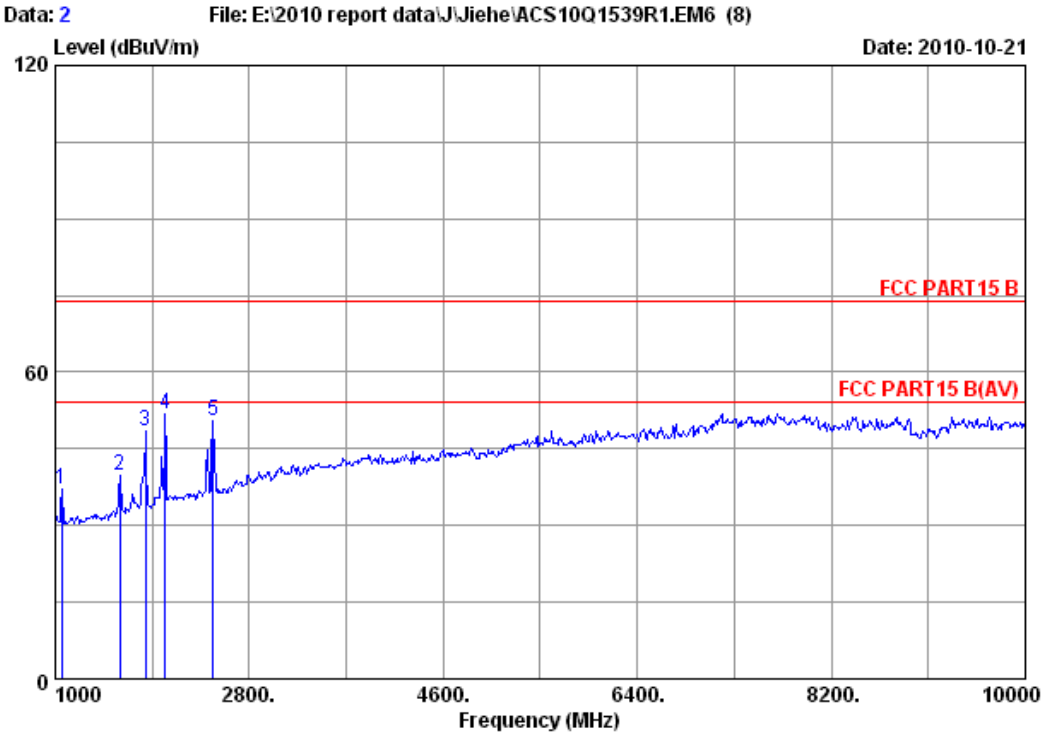
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 1
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Stand-up With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	41.61	34.23	74.00	39.77	Peak
2	1720.000	27.61	6.14	36.87	45.43	42.31	74.00	31.69	Peak
3	1837.000	28.27	6.33	36.79	47.97	45.78	74.00	28.22	Peak
4	2017.000	29.21	6.67	36.69	49.06	48.25	74.00	25.75	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 2
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 23*C/54% Engineer : Frank-Li
EUT : Motherboard M/N:Giada MI-ION2
Power : AC 120V/60Hz
Test mode : Running Burnin Test V5.3
M/N : DVI+HDMI:1920*1200@60Hz
: Stand-up With Cover

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1063.000	25.54	4.89	37.81	44.41	37.03	74.00	36.97	Peak
2	1603.000	26.96	5.91	36.94	43.99	39.92	74.00	34.08	Peak
3	1837.000	28.27	6.33	36.79	50.68	48.49	74.00	25.51	Peak
4	2017.000	29.21	6.67	36.69	52.50	51.69	74.00	22.31	Peak
5	2467.000	29.48	7.54	36.60	49.99	50.41	74.00	23.59	Peak

Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

5. DEVIATION TO TEST SPECIFICATIONS

[NONE]