Technical Compliance Statement

For the following information **Ref. File No.: C1M1412078**

Product Name	:	Notebook
Model Number	:	RZ09-0130
Serial Number	:	N/A
Brand	:	Razer
Applicant	:	Razer Inc.
Manufacturer	:	Razer Inc.
Standards	:	FCC 47 CFR Part 15 Subpart B/Oct. 2013 and CISPR 22/1997 and ICES-003/2012 (Class B Limit)

We hereby certify that the above product has been tested by us and complied with the FCC and IC official limits. These products might be marketed at the US accordance to FCC Rule based on the standard CFR 47 Part 2 and Part 15 Class B Equipment Regulations. The test was performed accordance to the procedures from ANSI C63.4-2009. The test data & results are issued on the test report no. EM-F140157A.

Signature

Alex Deng/Deputy Manager
Date: 2014. 12. 12

Test Laboratory:
AUDIX Technology Corporation, EMC Department
NVLAP Lab. Code: 200077-0
FCC OET Designation: TW1004
Web Site: www.audixtech.com

NVLAP Lab Code 200077A

The statement is based on a single evaluation of one sample of the above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab logo.

TEST REPORT FOR FCC DoC and INDUSTRY CANADA

Razer Inc.

Notebook

Model No.: RZ09-0130

Brand: Razer

Prepared for : Razer Inc.
2035 Corte Del Nogal, Suite 101,
Carlsbad CA 92011, USA

Prepared by : AUDIX Technology Corporation
EMC Department
No. 53-11, Dingfu, Linkou Dist.,
New Taipei City 244, Taiwan

Tel : (02) 2609-9301, 2609-2133
Fax : (02) 2609-9303

File Number	:	C1M1412078 (ACS Ref. No.: ACS14Q1741)
Report Number	:	EM-F140157A
Date of Test of Rev. A	:	2014. 12. 11 ~ 12
Date of Report of Rev. A	:	2014. 12. 12

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TEST REPORT FOR COMPLIANCE DECLARATION

Applicant	:	Razer Inc.
Manufacturer	:	Razer Inc.
EUT Description	:	Notebook
(A) Model No.	:	RZ09-0130
(B) Serial No.	:	N/A
(C) Brand	:	Razer
(D) Power Supply	:	DC 19V
(E) Test Voltage	:	AC 120V/60Hz (Via Adapter)

Measurement Standard Used:

FCC CFR 47 Part 15 Subpart B/Oct. 2013 and CISPR 22/1997
ANSI C63.4-2009
ICES-003 Issue 5 Aug. 2012

The device described above was tested by AUDIX Technology Corporation, to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart B with the provisions of sections 15.107 and 15.109 and ICES-003 Class B limits both conducted and radiated emissions.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC and IC official limits.

This report applies to above tested sample only and which shall not be reproduced in part without written approval of AUDIX Technology Corporation.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This report is based on reports of EM-F140157.

Date of Test of Rev. A: 2014. 12. 11 ~ 12 Date of Report of Rev. A: 2014. 12. 12

Producer: _____
(Kitty Ni/Administrator)

Signatory: _____
(Alex Deng/Deputy Manager)

Name of the Representative of the Responsible Party : _____

Signature : _____

1. DESCRIPTION OF VERSION

Edition No.	Date of Revision	Revision Summary	Report Number
0	2014. 03. 18	Original Report. (Original model: RZ09-0116)	EM-F140157
Rev. A	**2014. 12. 12**	**1. To add a new model no.** **2. To add a new main board.** **3. To add a new CPU.** **4. To add a new panel.**	**EM-F140157A**

2. SUMMARY OF STANDARDS AND RESULTS

2.1. Description of Standards and Results

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

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Powerline Conducted Emission Measurement	FCC CFR 47 Part 15 Subpart B: 2013 and ICES-003: 2012	Class B	PASS
Radiated Emission Measurement	FCC CFR 47 Part 15 Subpart B: 2013 and CISPR 22: 1997 ICES-003: 2012	Class B	PASS

3. GENERAL INFORMATION

3.1. Description of Device (EUT)

Description	:	Notebook
Model Number	:	RZ09-0130
Serial Number	:	N/A
Brand	:	Razer
Applicant	:	Razer Inc. 2035 Corte Del Nogal, Suite 101, Carlsbad CA 92011, USA
Manufacturer	:	Razer Inc. 2035 Corte Del Nogal, Suite 101, Carlsbad CA 92011, USA
Date of Receipt of Sample of Rev. A	:	2014. 12. 10
Date of Test of Rev. A	:	2014. 12. 11 ~ 12
List of Interface Ports of EUT	:	1 x HDMI Port 3 x USB Ports 1 x Headphone Port 1 x DC IN Port

Remark for Rev. A:

1. The EUT is an additional version with original report number EM-F140157. The difference with original report are:
   a. To add a new model no. "RZ09-0130" for different sales marketing.
   b. To add a new main board "BYD, Betty-R3".
   c. To add a new CPU "Intel, i7-4720HQ, 2.6GHz".
   d. To add a new panel "LG Display, LP140WF3".

2. The EUT with the new components was criticized and reconfirmed to comply with EMI test requirement. The supplementary test data are recorded in this report of EM-F140157A.

3. This report is based on report of EM-F140157.

3.2. Description of Key Component Lists

3.2.1. For the All Component Lists

Item	Brand	Model	Spec
Main Board	BYD	Betty-R2	---
	BYD	**Betty-R3**	**---***
CPU	Intel	i7-4702HQ	2.2GHz Haswell BGA / 37W / QC / GT2
	Intel	**i7-4720HQ**	**2.6GHz***
SSD	SAMSUNG	MZ-NTE1280HMGR-0000	128GB
	SAMSUNG	MZ-NTE2560HMHP-0000	256GB
	SAMSUNG	MZ-NTE5120HMJH-0000	512GB
WIFI Card	Intel	7260HMW	2.4GHz & 5GHz 802.11a/b/g/n/ac + Bluetooth ®4.0 FCC ID: PD97260H
Panel	SHARP	LQ140Z1JW01	LQ140Z1JW01_14” 3200x1800_TFT_M00285
	LG Display	**LP140WF3**	**14", TFT(LCD Open Cell)***
Battery	BYD	Betty	11.1V, 6400mAh, 71.04Wh
Adapter	Razer System Pte Ltd	RC30-0083	I/P: AC100-240V, 50/60Hz O/P: DC 19V, 7.9A
	Razer Inc.	RC30-0099	I/P: AC100-240V, 50/60Hz O/P: DC 19V, 7.9A
	AC Power Cord: Non-Shielded, Detachable, 0.8m (3 Pin) DC Power Cord: Non-Shielded, Undetachable, 1.8m		
Note: “*” Standing for adding new configuration.			

Remark: For a more detailed features description, please refer to the manufacturer’s specifications or the user manual.

3.2.2. For the EUT Test Configuration

Item	Brand	Model	Spec
Main Board	**BYD**	**Betty-R3**	**---**
CPU	**Intel**	**i7-4720HQ**	**2.6GHz**
SSD	SAMSUNG	MZ-NTE1280HMGR-0000	128GB
WIFI Card	Intel	7260HMW	2.4GHz & 5GHz 802.11a/b/g/n/ac + Bluetooth ®4.0 FCC ID: PD97260H
Panel	**LG Display**	**LP140WF3**	**14", TFT(LCD Open Cell)**
Battery	BYD	Betty	11.1V, 6400mAh, 71.04Wh
Adapter	Razer Inc.	RC30-0099	I/P: AC100-240V, 50/60Hz O/P: DC 19V, 7.9A
	AC Power Cord: Non-Shielded, Detachable, 0.8m (3 Pin) DC Power Cord: Non-Shielded, Undetachable, 1.8m		
Resolution	1920*1200/60Hz		

Remark: The worse configuration was performed tested and issued report.
The test data are recorded in this report of EM-F140157A.

Remark：

The EUT with the following test modes were pre-scanned.

Test Item	AC Adapter	Display, Resolution/Frequency
Conducted Emission & Radiated Emission	Razer Inc., RC30-0099	“H” Pattern, 1920*1200/60Hz (Via HDMI)

Finally, the under worst test modes were demonstrated compliance with the standards in the report.

Test Item	Input Port	Display, Resolution/Frequency
Conducted Emission	Razer Inc., RC30-0099	“H” Pattern, 1920*1200/60Hz (Via HDMI)
Radiated Emission	Razer Inc., RC30-0099	“H” Pattern, 1920*1200/60Hz (Via HDMI)

3.3. Description of Tested Supporting Unit and Cable

3.3.1. Support Peripheral Unit

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	Monitor	DELL	UP2414Q	CN-0W09C2-74445-467-002L	FCC DoC Approved
2	Laser Printer	SAMSUNG	ML-1630	4561B1CP600023X	A3LML1630
3	USB Mouse	Lenovo	45J4886	N/A	FCC DoC Approved
4	I-POD PLAYER	APPLE	A1204	4H722TA0VTE	FCC DoC Approved
5	I-POD Earphone	APPLE	N/A	N/A	N/A
6	Dual-Band Wireless-N Gigabit Router	ASUS	RT-N56U	B71AK3005372	MSQ-RTN56U

3.3.2. Cable Lists

No.	Signal Cable Description Of The Above Support Units
1	HDMI Cable: Shielded, Detachable, 1.8m Power Cord: Non-Shielded, Detachable, 1.8m
2	USB Cable: Shielded, Detachable, 1.8m Power Cord: Non-Shielded, Detachable, 1.8m
3	USB Cable: Shielded, Undetachable, 1.8m
4	USB Cable: Shielded, Undetachable, 1m
5	Earphone Cable: Non-Shielded, Detachable, 0.9m
6	Power Cord: Non-Shielded, Undetachable, 1.5m, Bonded a ferrite core

3.4. Description of Test Facility

Name of Firm	:	**AUDIX Technology Corporation** **EMC Department** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan
Test Location & Facility	:	**No. 7 Shielded Room** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan. **No. 1 10m Semi-Anechoic Chamber** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan. Federal Communication Commission Registration Number: 705125 Renewal on July 02, 2012
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724

3.5. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conduction Test	150kHz~30MHz	± 3.43dB
Radiation Test (Distance: 10m)	30MHz~300MHz	± 2.99dB
	300MHz~1000MHz	± 2.73dB
Radiation Test (Distance: 3m)	Above 1GHz	± 3.73dB

Remark：Uncertainty = $ku_c(y)$

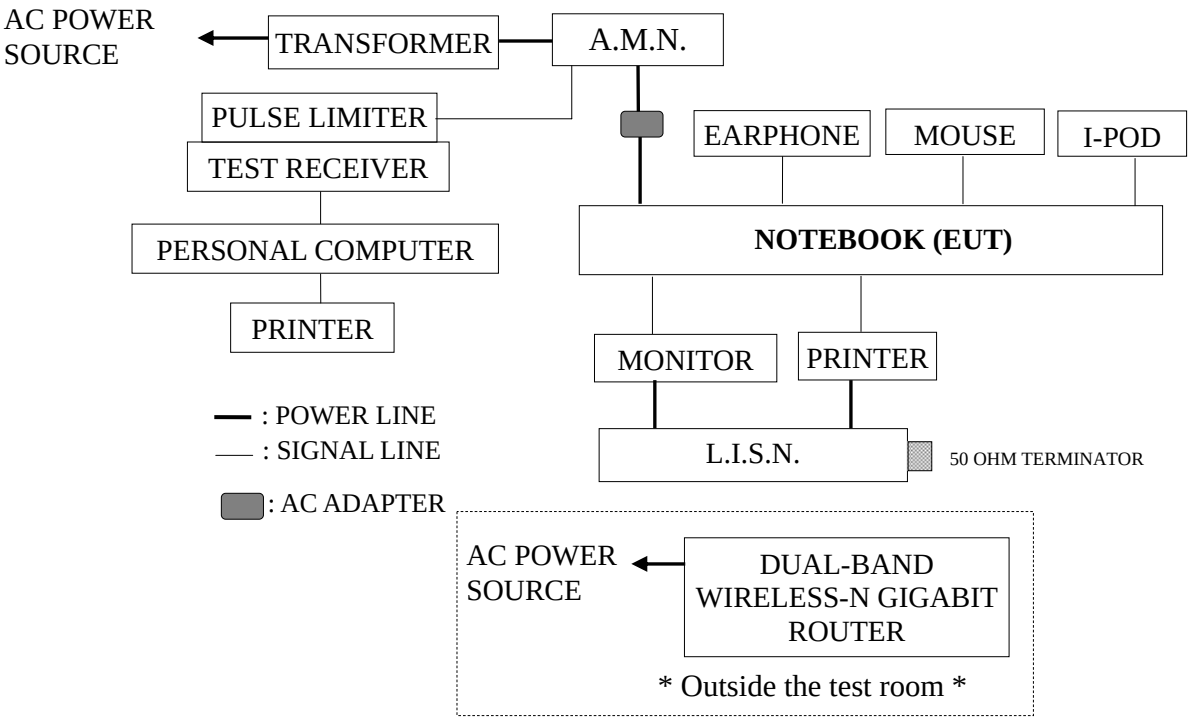
4. POWERLINE CONDUCTED EMISSION MEASUREMENT

4.1. Test Equipment

The following test equipment were used during the conducted emission measurement:
(No. 7 Shielded Room)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Test Receiver	R & S	ESCI	101276	2014. 04. 14	1 Year
2.	A.M.N.	R & S	ENV4200	100169	2014. 05. 06	1 Year
3.	L.I.S.N.	Kyoritsu	KNW-407	8-1539-3	2014. 01. 22	1 Year
4.	Pulse Limiter	R & S	ESH3-Z2	101495	2014. 01. 18	1 Year

4.2. Block Diagram of Test Setup



4.3. Powerline Conducted Emission Limit (FCC§15.107/ICES-003, Class B)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dBμV	56 ~ 46 dBμV
500kHz ~ 5MHz	56 dBμV	46 dBμV
5MHz ~ 30MHz	60 dBμV	50 dBμV

Remark: 1. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.
2. The lower limit applies at the band edges.

4.4. Operating Condition of EUT

EUT Exercise Program and Condition	
Operating System	Windows 8.1
Test Program	BurnIn Test
Graphic Controller	Display scrolling “H (Arial, 10)” pattern with respective resolution
SSD Controller	Read/Write operation to SSD
Audio Controller	Play 1kHz audio signal
Wireless LAN	Data transfer
USB Port	Sent “H” (Arial 10) to printer
The other peripheral devices were driven and operated in turn during all testing.	

4.5. Test Procedure

The EUT was placed on the table which was above the ground by 80cm and it's adapter power cord connected to the AC mains through an Artificial Mains Network (A.M.N.). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)
Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.4-2009 during conducted measurement.

The bandwidth of the R & S Test Receiver ESCI was set at 9kHz.

The frequency range from 150kHz to 30MHz was pre-scanned with a peak detector.

The all final readings from test receiver were measured with Quasi-Peak detector and Average detector. (Remark : If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

4.6. Powerline Conducted Emission Measurement Results

PASSED. All emissions not reported below are too low against the prescribed limits.

The EUT with following test mode was measured during the testing and all the test results are listed in the next pages.

EUT: Notebook M/N: RZ09-0130

Test Date: 2014. 12. 12 Temperature: 22℃ Humidity: 51%

The details of test modes are as follows:

Mode	AC Adapter	Display, Resolution/Frequency	Reference Data No.	
			Neutral	Line
1.	Razer Inc., RC30-0099	"H" Pattern, 1920*1200/60Hz (Via HDMI)	# 2	# 1

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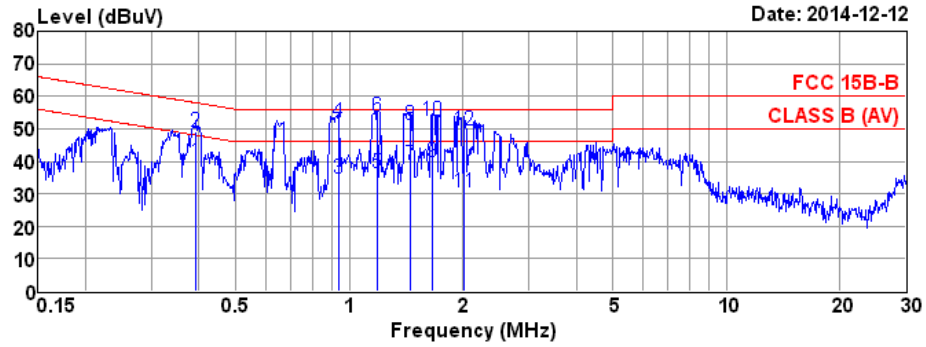
Email:emc@audixtech.com

Data: 2 File: D:\test data\REPORT\2014\C1M1412XXX\C1M1412078-C-D.EM6 (2)



Site no. : No.7 Shielded Room Data no. : 2
Condition : ENV4200 100169 Phase : NEUTRAL
Limit : FCC 15B-B
Env. / Ins. : 22*C / 51% ESCI (1276) Engineer : Ken
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz FULL SYSTEM

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Emission Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.393	10.47	0.03	9.86	19.56	39.92	47.99	8.07	Average
2	0.393	10.47	0.03	9.86	28.86	49.22	57.99	8.77	QP
3	0.938	10.45	0.04	9.86	14.45	34.80	46.00	11.20	Average
4	0.938	10.45	0.04	9.86	31.90	52.25	56.00	3.75	QP
5	1.191	10.46	0.04	9.85	16.28	36.63	46.00	9.37	Average
6	1.191	10.46	0.04	9.85	33.31	53.66	56.00	2.34	QP
7	1.449	10.47	0.05	9.86	18.49	38.87	46.00	7.13	Average
8	1.449	10.47	0.05	9.86	30.74	51.12	56.00	4.88	QP
9	1.662	10.47	0.05	9.86	19.54	39.92	46.00	6.08	Average
10	1.662	10.47	0.05	9.86	32.15	52.53	56.00	3.47	QP
11	2.023	10.48	0.06	9.86	9.90	30.30	46.00	15.70	Average
12	2.023	10.48	0.06	9.86	29.09	49.49	56.00	6.51	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + 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.

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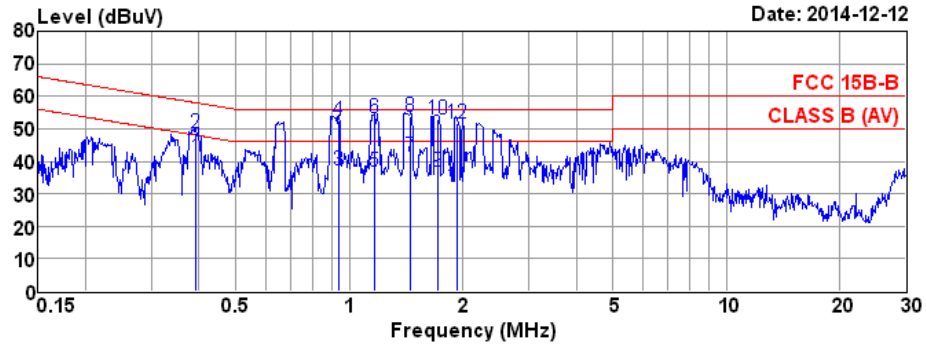


Site no. : No.7 Shielded Room Data no. : 1
Condition : ENV4200 100169 Phase : LINE
Limit : FCC 15B-B
Env. / Ins. : 22*C / 51% ESCI (1276) Engineer : Ken
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz FULL SYSTEM

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Emission Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.393	10.48	0.03	9.86	20.53	40.90	47.99	7.09	Average
2	0.393	10.48	0.03	9.86	28.40	48.77	57.99	9.22	QP
3	0.938	10.46	0.04	9.86	16.81	37.17	46.00	8.83	Average
4	0.938	10.46	0.04	9.86	32.06	52.42	56.00	3.58	QP
5	1.172	10.47	0.04	9.85	16.56	36.92	46.00	9.08	Average
6	1.172	10.47	0.04	9.85	33.02	53.38	56.00	2.62	QP
7	1.456	10.48	0.05	9.86	21.17	41.56	46.00	4.44	Average
8	1.456	10.48	0.05	9.86	33.33	53.72	56.00	2.28	QP
9	1.716	10.49	0.06	9.86	16.26	36.67	46.00	9.33	Average
10	1.716	10.49	0.06	9.86	32.40	52.81	56.00	3.19	QP
11	1.939	10.50	0.06	9.86	11.76	32.18	46.00	13.82	Average
12	1.939	10.50	0.06	9.86	31.13	51.55	56.00	4.45	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + 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.

5. RADIATED EMISSION MEASUREMENT

5.1. Test Equipment

The following test equipments are used during the radiated emission measurement：

5.1.1. For 30MHz~1000MHz Frequency (At No. 1 10m Semi-Anechoic Chamber)

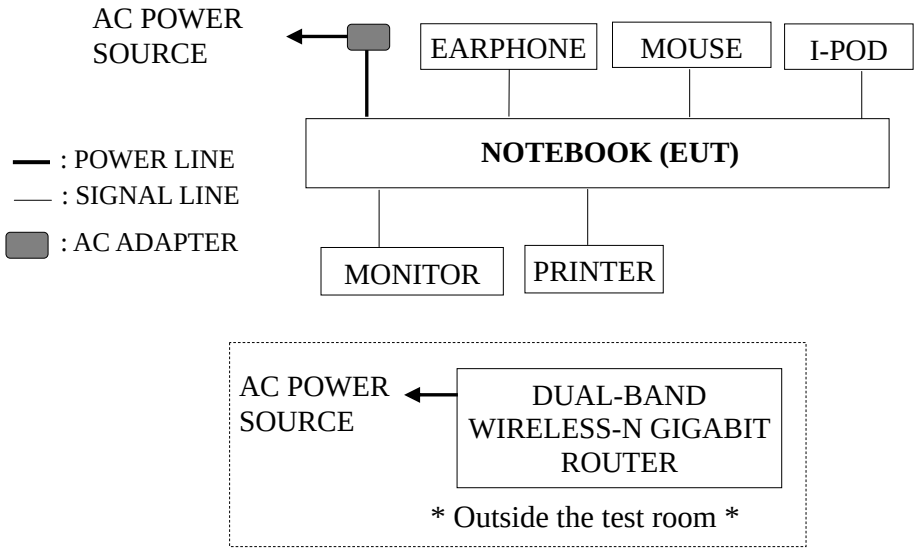
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-503	MY52220443	2014. 02. 18	1 Year
2.	Spectrum Analyzer	Agilent	N9010A-503	MY52220119	2014. 06. 25	1 Year
3.	Test Receiver	R & S	ESCI 7	100922	2014. 05. 06	1 Year
4.	Amplifier	Sonoma	11909A	187158	2014. 02. 27	1 Year
5.	Amplifier	Sonoma	11909A	187159	2014. 02. 27	1 Year
6.	Bilog Antenna	TESEQ	CBL6112D	33819	2014. 04. 19	1 Year
7.	Bilog Antenna	TESEQ	CBL6112D	33820	2014. 04. 19	1 Year

5.1.2. For Above 1GHz Frequency (At No. 1 10m Semi-Anechoic Chamber)

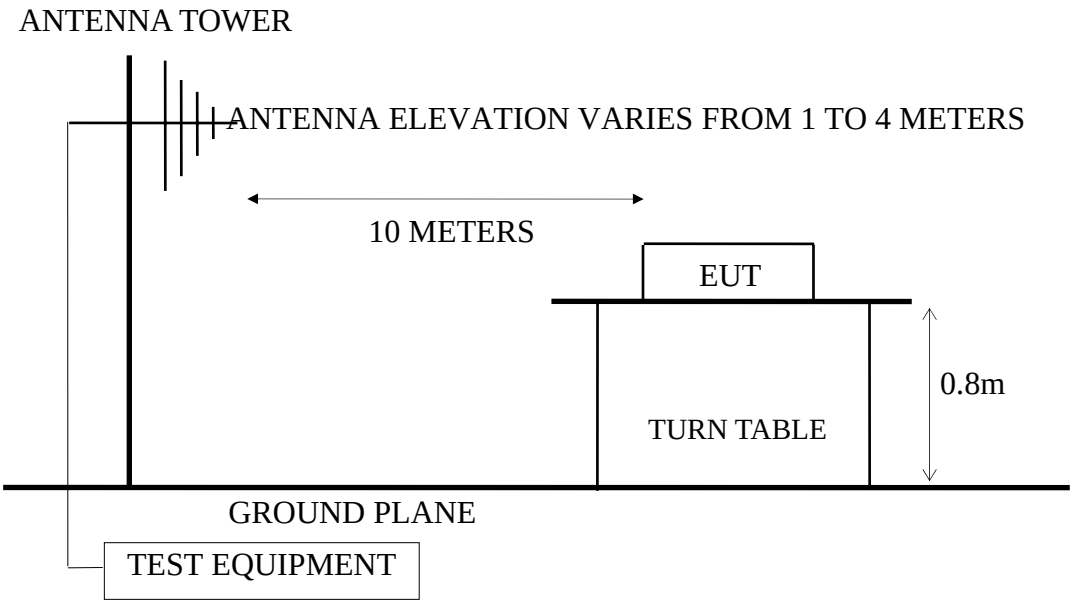
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-526	MY51250943	2014. 02. 18	1 Year
2.	Microwave Preamplifier	Agilent	8449B	3008A02681	2014. 03. 28	1 Year
3.	Double-Ridged Waveguide Horn	ETS-Lindgren	3117	00114403	2014. 03. 18	1 Year

5.2. Block Diagram of Test Setup

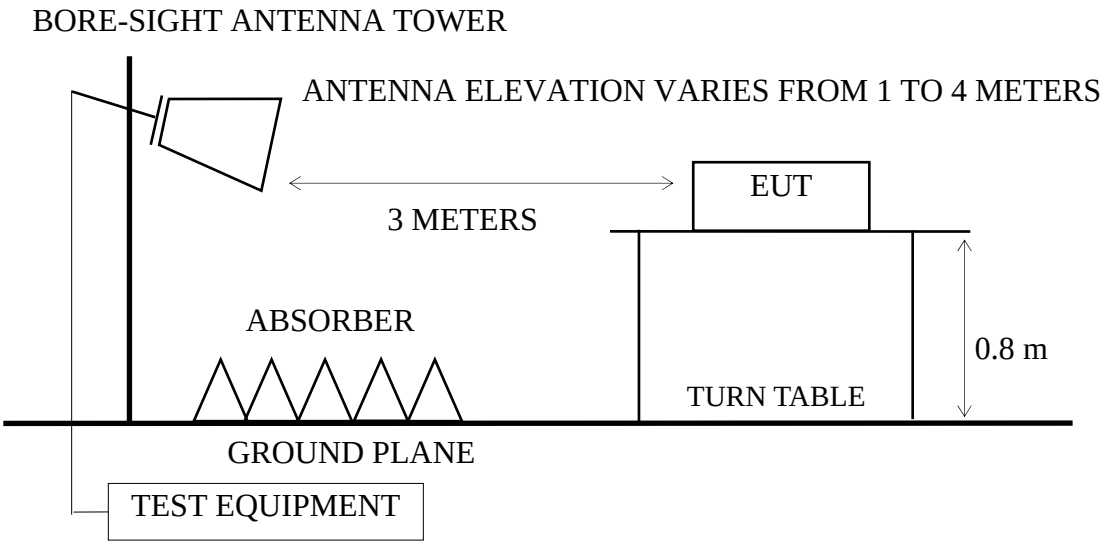
5.2.1. Block Diagram of connection between EUT and simulators



5.2.2. Semi-Anechoic Chamber (10m) Setup Diagram for 30-1000MHz



5.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



5.3. Radiation Emission Limit (FCC§15.109/CISPR 22/ICES-003, Class B)

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dBμV/m)
30 ~ 230	10	30
230 ~ 1000	10	37
Above 1000	3	74.0 (Peak)
Above 1000	3	54.0 (Average)

Note： (1) The tighter limit applies at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the E.U.T.

(3) There is no over 1GHz limits in CISPR 22/1997 standard. Therefore, a FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.109 (a)(g).

5.4. Operating Condition of EUT

Same as conducted emission measurement which is listed in 4.4., except the test set up replaced by section 5.2.

5.5. Test Procedure

5.5.1. For Frequency Range was 30MHz-1000MHz which measurement distance was 10m at Semi-Anechoic Chamber:

The EUT and its simulator were placed on a turn table which was 0.8 meter above ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set to 10 meters away from the receiving antenna which were mounted on an antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antennas were used as a receiving antenna. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4-2009 on radiated measurement.

The bandwidth of the R & S Test Receiver ESCI7 was set at 120 kHz.

The frequency range from 30MHz to 1000MHz was checked with Peak detector and all final readings of measurement were with Quasi-Peak detector.

5.5.2. For Frequency Range was above 1GHz which measurement distance was 3m at Semi-Anechoic Chamber:

The EUT and its simulators were placed on a turn table which was 0.8 meter above ground. The portion of the test volume that was obstructed by absorber placed on the floor (30cm maximum). The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set to 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna were set on measurement, and both average and peak emission level were recorded form spectrum analyzer. In order to find the maximum emission level, all the interface cables were manipulated according to ANSI C63.4-2009 on radiated measurement.

The resolution bandwidth of Agilent Spectrum Analyzer N9010A-526 was set at 1MHz.

The frequency range above 1GHz was checked and all final readings of measurement were with Peak and Average values.

5.6. Radiated Emission Measurement Results

PASSED. All emissions not reported below are too low against the prescribed limits.

For 30MHz-1000MHz frequency range：

The EUT with following test mode was measured during the testing and all the test results are listed in section 5.6.1.

EUT: Notebook M/N: RZ09-0130

Test Date: 2014. 12. 11 Temperature: 19℃ Humidity: 68%

The details of test modes are as follows:

Mode	AC Adapter	Display, Resolution/Frequency	Reference Data No.	
			Horizontal	Vertical
1.	Razer Inc., RC30-0099	"H" Pattern, 1920*1200/60Hz (Via HDMI)	# 2	# 1

For above 1GHz frequency range：

The EUT with following test mode was measured during the testing and all the test results are listed in section 5.6.2.

EUT: Notebook M/N: RZ09-0130

Test Date: 2014. 12. 11 Temperature: 19℃ Humidity: 68%

The details of test modes are as follows:

Mode	AC Adapter	Display, Resolution/Frequency	Reference Data No.	
			Horizontal	Vertical
1.	Razer Inc., RC30-0099	"H" Pattern, 1920*1200/60Hz (Via HDMI)	# 4	# 3

5.6.1. 30 - 1000MHz Frequency Range Radiated Emission Measurement Results at Semi-Anechoic Chamber

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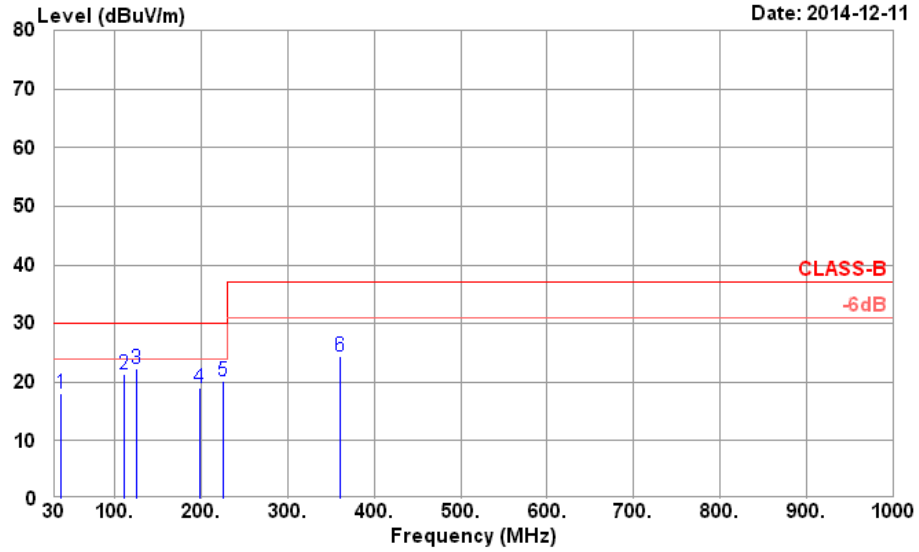
Data: 2 File: D:\TEST DATA\REPORT\2014\C1M1412XXX\C1M1412078\C1M1412078.EM6 (4)



Site no. : 10m Chamber No.1 Data no. : 2
Dis. / Ant. : 10m 6112D 33820 Ant. pol. : HORIZONTAL
Limit : CLASS-B
Env. / Ins. : 19*C / 68% Engineer : ROY-YU
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz HDMI

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	36.79	15.22	1.00	1.93	18.15	30.00	11.85	QP
2	110.51	11.71	1.77	7.79	21.27	30.00	8.73	QP
3	125.06	12.10	1.89	8.34	22.33	30.00	7.67	QP *
4	197.81	9.25	2.44	7.25	18.94	30.00	11.06	QP
5	225.94	10.98	2.64	6.61	20.23	30.00	9.77	QP
6	360.77	14.72	3.45	6.14	24.31	37.00	12.69	QP

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

3. The worst emission was detected at 125.06MHz with corrected signal level of 22.33dBμV/m (limit is 30.0dBμV/m) when the antenna was at horizontal polarization and was at 4.0m high and the turn table was at 130°.

4. 0°was the table front facing the antenna. Degree is calculated from 0°clockwise facing the antenna.

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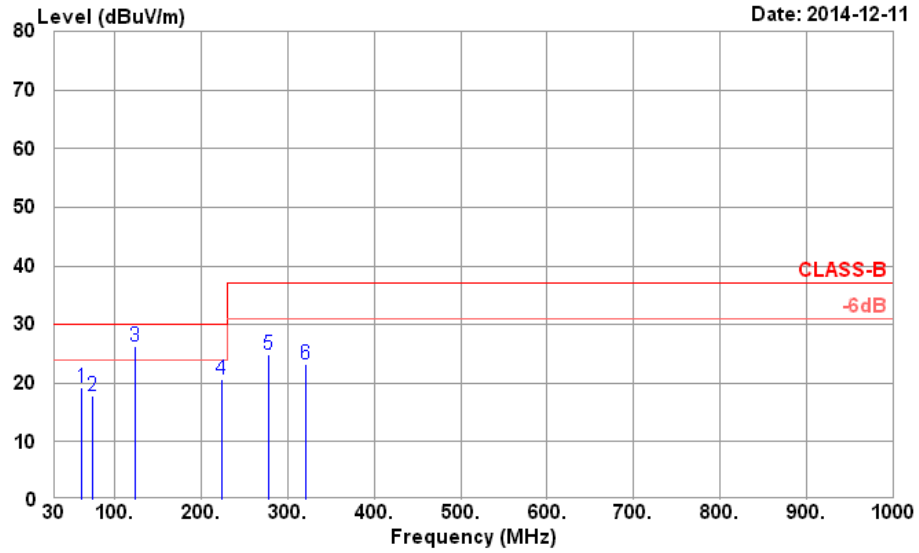
Data: 1 File: D:\TEST DATA\REPORT\2014\C1M1412XXX\C1M1412078\C1M1412078.EM6 (4)



Site no. : 10m Chamber No.1 Data no. : 1
Dis. / Ant. : 10m 6112D 33819 Ant. pol. : VERTICAL
Limit : CLASS-B
Env. / Ins. : 19*C / 68% Engineer : ROY-YU
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz HDMI

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	62.01	6.33	0.92	12.03	19.28	30.00	10.72	QP
2	74.62	6.87	1.01	9.85	17.73	30.00	12.27	QP
3	124.09	12.02	1.35	13.03	26.40	30.00	3.60	QP *
4	223.03	10.71	1.89	8.03	20.63	30.00	9.37	QP
5	278.32	12.76	2.15	10.06	24.97	37.00	12.03	QP
6	320.03	13.64	2.33	7.23	23.20	37.00	13.80	QP

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

3.The worst emission was detected at 124.09MHz with corrected signal level of 26.40dBμV/m (limit is 30.0dBμV/m) when the antenna was at vertical polarization and was at 1.0m high and the turn table was at 119°.

4.0°was the table front facing the antenna. Degree is calculated from 0°clockwise facing the antenna.

5.6.2. Above 1GHz Frequency Range Radiated Emission Measurement Results at Semi-Anechoic Chamber

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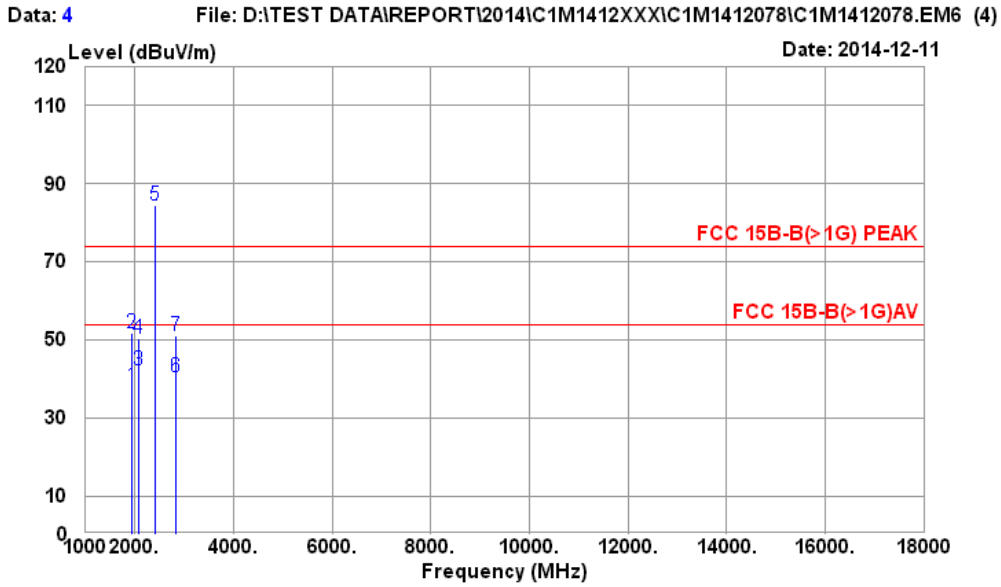

Site no. : 10m Chamber No.1
Dis. / Ant. : 3m 3117 14403
Limit : FCC 15B-B(>1G) PEAK
Env. / Ins. : 19*C / 68%
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz HDMI

Data no. : 4
Ant. pol. : HORIZONTAL
Engineer : ROY-YU

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	1930.00	31.19	2.37	35.50	40.08	38.14	54.00	15.86	Average
2	1930.00	31.19	2.37	35.50	53.82	51.88	74.00	22.12	Peak
3	2070.00	31.78	2.47	35.50	43.43	42.18	54.00	11.82	Average
4	2070.00	31.78	2.47	35.50	51.75	50.50	74.00	23.50	Peak
*5	2415.00	32.20	2.80	35.61	85.12				
6	2825.00	32.68	2.91	35.77	40.77	40.59	54.00	13.41	Average
7	2825.00	32.68	2.91	35.77	51.26	51.08	74.00	22.92	Peak

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

3. "*" means the radiated emission from the transmitter/transceiver, it is ignored in this report.

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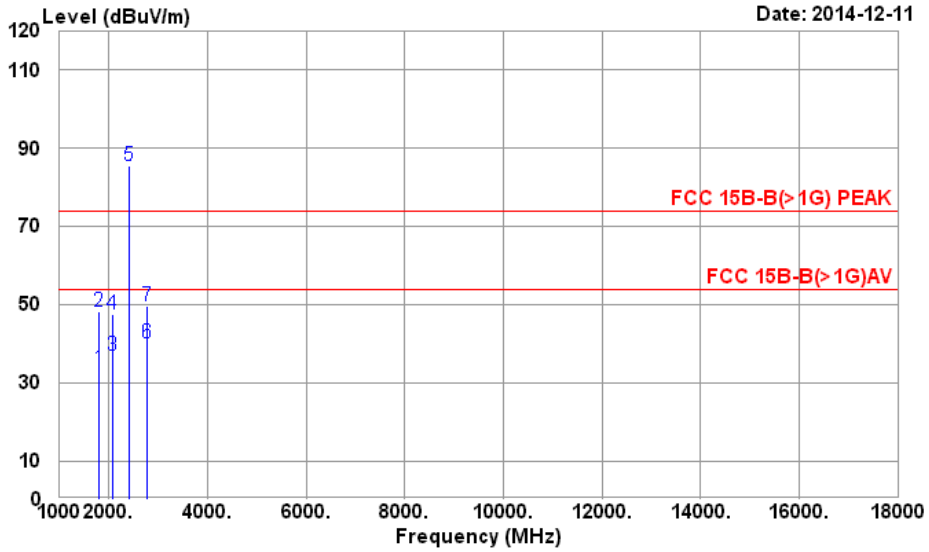
Data: 3 File: D:\TEST DATA\REPORT\2014\C1M1412XXX\C1M1412078\C1M1412078.EM6 (4)



Site no. : 10m Chamber No.1 Data no. : 3
Dis. / Ant. : 3m 3117 14403 Ant. pol. : VERTICAL
Limit : FCC 15B-B(>1G) PEAK
Env. / Ins. : 19*C / 68% Engineer : ROY-YU
EUT : RZ09-0130
Power Rating : 120Vac/60Hz
Test Mode : 1920*1200/60Hz HDMI

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	1795.00	30.18	2.32	35.56	36.62	33.56	54.00	20.44	Average
2	1795.00	30.18	2.32	35.56	51.13	48.07	74.00	25.93	Peak
3	2070.00	31.78	2.47	35.50	38.38	37.13	54.00	16.87	Average
4	2070.00	31.78	2.47	35.50	48.90	47.65	74.00	26.35	Peak
* 5	2415.00	32.20	2.80	35.61	86.02				
6	2765.00	32.62	2.90	35.74	40.38	40.16	54.00	13.84	Average
7	2765.00	32.62	2.90	35.74	49.94	49.72	74.00	24.28	Peak

Remarks: 1.Emission Level= Antenna Factor + Cable Loss + Reading - Preamp.
2.The emission levels that are 20dB below the official limit are not reported
3. "*" means the radiated emission from the transmitter/transceiver, it is ignored in this report.

6. DEVIATION TO TEST SPECIFICATIONS

【NONE】