18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea

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Report No.: F690501/RF-EMG003039

## FCC CLASS B COMPLIANCE REPORT (DOC)

This certifies that the following designated product	
Name: WLAN 11n Mini US Model Name: WL-620	And the contraction of the contr
is herewith confirmed and found to comply with the requirement 15 regulations for the evaluation of electromagnetic compatibility.	
<ul><li>This Device complies with Part 15 of the FCC rules, operation (1) This device may not cause harmful interference and,</li><li>(2) This device must accept any interference received, includin operation.</li></ul>	
This declaration is the responsibility of the m	nanufacturer / importer
Applicant : CC&C Technolo Address of Applicant : No.9 Building Kunshan Export Processing Zoo Manufacturer : CC&C Techno Address of Manufacturer : No.9 Build Kunshan Export Processing Zoo	g,3 <sup>rd</sup> Main Street, ne, P.R.China logies,Inc. ing,3 <sup>rd</sup> Main Street,
MANUFACTURER / IMPORTER	TEST LABORATORY  This is the result of test, that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the FCC-mark for EMI on the product complying with the inspection sample.
( Name ) ( Date )	Forest Lee December 22, 2009



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: 1 of

# **FCC TEST REPORT**

Reference No.

: G-44-2009-03309

**Applicant** 

: CC&C Technologies,Inc.

**Equipment Under Test (EUT):** 

Product Name: WLAN 11n Mini USB Adapter

Model Name: WL-6203-V1

Applied Standards: FCC Part 15: 2008, Subpart B, Class B

ANSI C63.4: 2003

CISPR 22: 2006

**Date of Receipt** 

: December 17, 2009

**Date of Test** 

: December 18, 2009

Date of Issue

: December 22, 2009

**Test Results** 

: Complied

Tested by

John Oh

Reviewed by

**Forest Lee** 

#### Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or Testing done by SGS International Electrical Approvals in connection with distribution or use of the product described in this report must be approved by SGS international Electrical Approvals in writing.

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#### 1. General Information

#### 1.1 Client Information

Applicant : CC&C Technologies,Inc.

Address of Applicant : No.9 Building,3<sup>rd</sup> Main Street,Kunshan Export

Processing Zone, P.R.China

Manufacturer : CC&C Technologies,Inc.

Address of Manufacturer : No.9 Building,3<sup>rd</sup> Main Street,Kunshan Export

Processing Zone, P.R.China

#### 1.2 Test Laboratory

Name and Address : SGS Testing Korea Co., Ltd.

18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea

435-041

#### 1.3 General Information of E.U.T.

Product Name : WLAN 11n Mini USB Adapter

Model Name : WL-6203-V1

Serial No. : N/A

Power Supply : AC 120V, 60Hz (Notebook Computer AC Adapter)

#### 1.4 Operating Modes and Conditions

Operating mode	Operating condition
Wi-Fi & Idle mode	Wi-Fi & Idle Mode continually

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#### 1.5 Peripheral Equipments

Description	Model	Serial No.	Manufacturer	
Wireless LAN	TNETWA622	8399	Texas Instruments	
Access Point	TINETVVAUZZ	0099	Texas instruments	
Notebook Computer	2374	N/A	IBM	

#### 1.6 Cable List

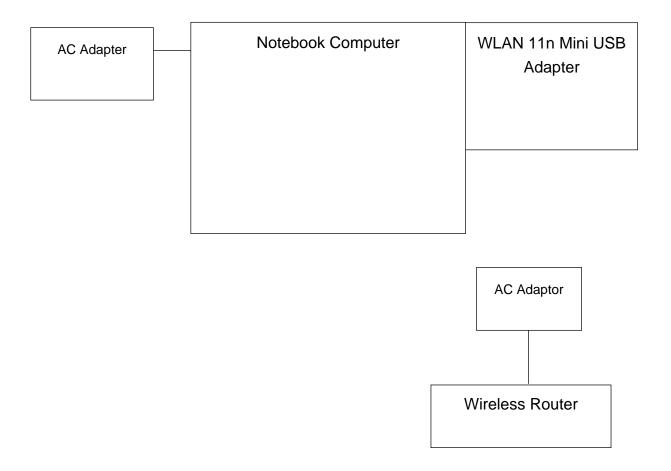
Sta	art	EN	D	Cable Spec.		
Name	I/O Port	Name	I/O Port	Length	Shield	
	DC INPUT	AC Adapter	-	1.5	Unshielded	
Notebook Computer	USB	WLAN 11n Mini USB Adapter	USB	-	-	
WLAN 11n Mini USB Adapter	USB	Notebook Computer	USB	-	-	
AC Adapter	•	Notebook Computer	•	1.5	Unshielded	
/ No ridapter	-	AC SOURCE	-	1.8	Unshielded	

### 1.7 System Configurations

Description Model		Serial No.	Manufacturer
Main Board	N/A	N/A	N/A

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#### 1.8 Test System Layout



#### 1.9 Applicable Standards for Testing

Standards	Status	Deviation
FCC Part 15, Subpart B	Applicable	No Deviation

#### 1.10 Summary of Test Results

Test Item	Standards	Results
Conducted Emission	FCC Part 15, Subpart B	Complied
Radiated Emission	FCC Part 15, Subpart B	Complied

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### 2. Test Description

#### 2.1 Test Equipments

Equipment	Model	Manufacturer	Last Cal. Date
TWO-LINE V-NETWORK	ENV216	R&S	2009.01.07
Test Receiver	ESHS10	R&S	2009.07.13
Test Receiver	ESU26	R&S	2009.04.21
Amplifier 8447F		HP	2009.07.02
Bi-Log Antenna	•		2009.07.22
Preamplifier	8449B	Agilent	2009.04.01
Horn Antenna	HF906	R&S	2009.10.08

Note: Only the calibration period of Antennas is 2 years but the period of every equipment is 1 year.

#### 2.2 Test Site

Conducted Emission: Shield Room in Gunpo Laboratory

Radiated Emission: 3m Semi-Anechoic Chamber in Gunpo Laboratory

#### 2.3 Conducted Emission Test Data at AC Power

Temperature : 22.3 ℃ Humidity : 54 % RH

Atmospheric Pressure: 101.2 kPa

FREQ.	LINE	LEVEL(dBμV)		LIMIT(dBµV)		MARGIN(dB)	
(MHz)	LINE	Q-Peak	Average	Q-Peak	Average	Q-Peak	Average
0.21	N	51.90	37.60	63.21	53.21	11.31	15.61
0.23	N	50.20	25.10	62.45	52.45	12.25	27.35
0.25	Н	51.00	28.10	61.76	51.76	10.76	23.66
0.51	Н	49.80	32.80	56.00	46.00	6.20	13.20
3.09	N	48.20	39.00	56.00	46.00	7.80	7.00

Note: • Line ( H ): Hot • Line ( N ): Neutral

• Margin = Limit - Level

See Appendix A (Conducted Emission)

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#### 2.4 Radiated Emission Test Data Below 1GHz

Temperature : 23.4 ℃ Humidity : 45.6 % RH

Atmospheric Pressure: 100.9 kPa

FREQ.	LEVEL	POL	AF	CL	Amp	F/S	LIMIT	MARGIN
(MHz)	(dB $\mu$ V)	(H/V)	(dB)	(dB)	(dB)	(dB <i>µ</i> V/m)	(dB $\mu$ V/m)	(dB)
166.32	33.30	V	8.29	1.27	25.25	16.34	43.50	27.16
199.20	32.00	Н	10.31	1.39	24.86	17.45	43.50	26.05
260.32	30.20	V	12.18	1.60	24.18	18.20	46.00	27.80
324.32	31.50	Н	13.87	1.78	23.96	21.41	46.00	24.59
333.12	30.60	Н	14.25	1.80	23.98	20.87	46.00	25.13
480.08	30.50	V	16.80	2.19	24.25	23.05	46.00	22.95

Note : • AF = Antenna Factor

- POL H = Horizontal
- CL = Cable Loss
- F/S = Field Strength

- Margin = Limit F/S
- POL V = Vertical
- Amp = Amplifier Gain
- F/S = Level + AF + CL Amp

#### **Above 1GHz**

Temperature : 23.6 ℃ Humidity : 46.0 % RH

Atmospheric Pressure: 100.0 kPa

FREQ.	LEVEL	POL	AF	CL	Amp	F/S	LIMIT	MARGIN
(MHz)	(dBμV)	(H/V)	(dB)	(dB)	(dB)	(dB <i>µ</i> √/m)	(dBµV/m)	(dB)
	-	-	A	verage [	Detector	-	-	-
1325.41	35.80	Η	24.72	3.61	35.32	28.80	54.00	25.20
1563.25	33.52	V	25.40	3.90	35.49	27.33	54.00	26.67
1685.21	34.85	Н	25.99	3.96	34.92	29.88	54.00	24.12
1999.63	36.20	Н	27.50	4.49	34.73	33.46	54.00	20.54
2113.16	32.10	V	27.66	4.53	34.98	29.30	54.00	24.70
2136.52	33.80	Н	27.69	4.62	35.10	31.02	54.00	22.98

Note : • AF = Antenna Factor

- CL = Cable Loss
- F/S = Field Strength

• POL H = Horizontal

- POL V = Vertical
- Amp = Amplifier Gain

Margin = Limit – F/S

• F/S = Level + AF + CL - Amp

#### 2.5 Modifications

There was no modified item during the test.

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2.6 Photographs of Conducted Emission





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2.7 Photographs of Radiated Emission (Below 1GHz)

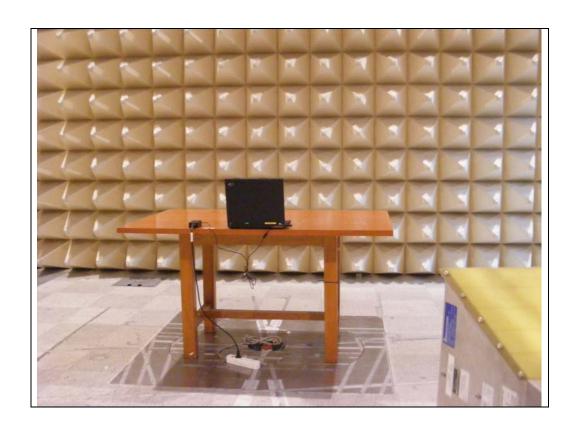




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2.8 Photographs of Radiated Emission (Above 1GHz)





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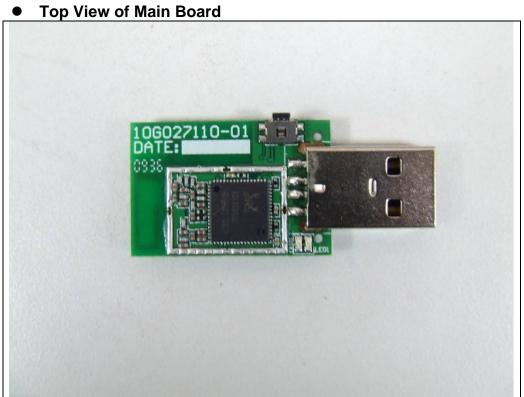
# 3. Photographs of EUT



#### **Rear View**



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### **Bottom View of Main Board**



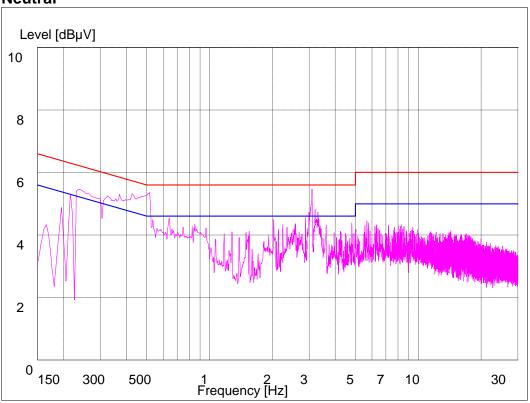
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#### **Appendix A : Conducted Emission**

#### Neutral



#### Hot

