Template Version:20110131

Testing Laboratory
1190

FCC TEST REPORT

for

47 CFR, Part 15, Subpart B

Equipment	:	Businesscardscanner Foldable
Model No.	:	BCS200211011
FCC ID	:	WFZBCS200211011
Filing Type	:	Certification
Applicant	:	**EU3C Company Limited** Unit 7,8/F,Austin Tower,22-26 Austin Avenue, Tsim ShaTsui,Kowloon,Hong Kong

Statement

The test result refers exclusively to the test presented test model / sample.

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Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by TAF or any agency of U.S. government.

SPORTON International Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

Table of Contents

History of this test report

Original Report Issue Date: Feb. 01, 2011

■ No additional attachment.

□ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

Template Version:20110131

Certificate No. : FC112632

Testing Laboratory
1190

FCC TEST REPORT

for

47 CFR, Part 15, Subpart B

Equipment : Businesscardscanner Foldable

Model No. : BCS200211011

FCC ID : WFZBCS200211011

Applicant : **EU3C Company Limited**
Unit 7,8/F,Austin Tower,22-26 Austin Avenue,
Tsim ShaTsui,Kowloon,Hong Kong

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 - 2003 and 47 CFR, Part 15, Subpart B.**

The test was carried out on Jan. 27, 2011 at **SPORTON International Inc.** LAB.

Castries Huang
Supervisor

SPORTON International Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1. Applicant

EU3C Company Limited

Unit 7,8/F,Austin Tower,22-26 Austin Avenue,

Tsim ShaTsui,Kowloon,Hong Kong

1.2. Manufacturer

Same as 1.1

1.3. Basic Description of Equipment under Test

Equipment	:	Businesscardscanner Foldable
Model No.	:	BCS200211011
Trade Name	:	EU3C Company Limited
USB Cable	:	Shielded, 1.0 m
Data Cable Type	:	Please see section 2.2 of this test report for details
Power Supply Type	:	Switching
AC Power Cord	:	From system
DC Power Cable	:	N/A

1.4. Feature of Equipment under Test

Please refer to user manual.

2. Test Configuration of Equipment under Test

2.1. Test Manner

a. During testing, the personal computer and equipment positions were varied according to ANSI C63.4-2003 and configuration operated in a manner which tended to maximize its emission characteristics in a typical application.

b. The complete test system included DELL PC, DELL LCD Monitor, DELL USB Keyboard, DELL USB Mouse, HP Printer, ACEEX Modem and EUT for EMI test.

c. The following test modes were performed for Radiation and Conduction test:

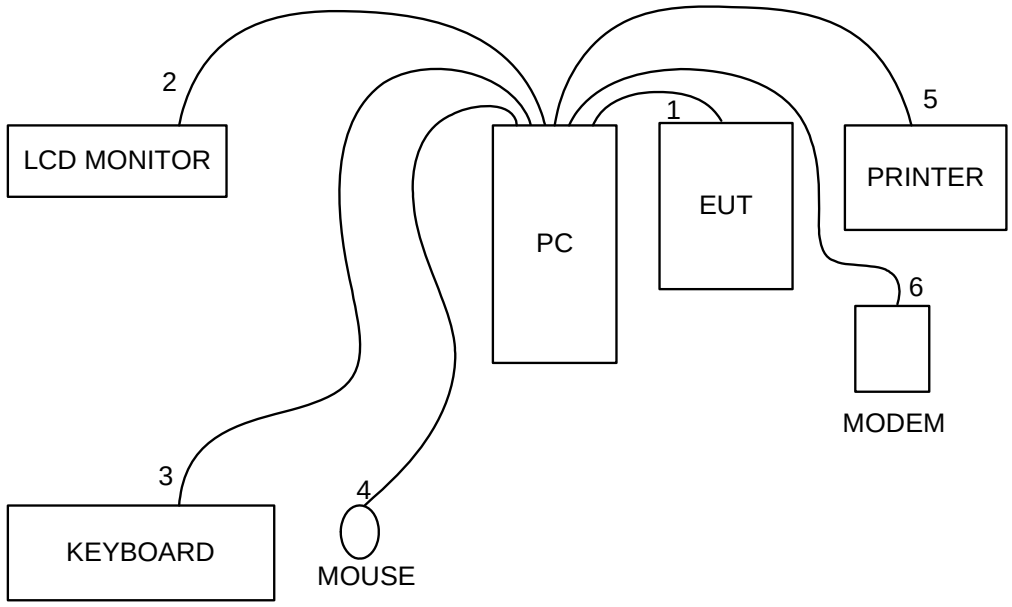
Mode 1. Scan

d. Frequency range investigated: Conduction 150 kHz to 30 MHz, Radiation 30 MHz to 1,000 MHz.

2.2. Description of Test System

No.	Peripheral	Manufacturer	Model Number	FCC ID	Cable / Spec. Description	Placed
1	Personal Computer	DELL	DCTA	DoC	N/A	Local
2	LCD Monitor	DELL	E198WFPf	DoC	D-SUB Cable, D-Shielded, 1.8m	Local
3	USB Keyboard	DELL	SK-8175	DoC	USB Cable, AL-F-Shielded, 1.8m	Local
4	USB Mouse	DELL	MOC5UO	DoC	USB Cable, AL-F-Shielded, 1.8m	Local
5	Printer	HP	DJ400	B94C2642X	LPT Cable, D-Shielded, 1.2m	Local
6	Modem	ACEEX	DM1414	IFAXDM1414	RS-232 Cable, D-Shielded, 1.15m	Local

2.3. Connection Diagram of Test System



1. The USB cable is connected from the EUT to the support unit 1.
2. The I/O cable is connected from the support unit 1 to the support unit 2.
3. The I/O cable is connected from the support unit 1 to the support unit 3.
4. The I/O cable is connected from the support unit 1 to the support unit 4.
5. The I/O cable is connected from the support unit 1 to the support unit 5.
6. The I/O cable is connected from the support unit 1 to the support unit 6.

Note: Above support unit on behalf of the meaning, please refer to section 2.2.

3. Test Software

An executive program, “EMCTEST.exe” under WIN XP, which generates a complete line of continuously repeating “H” pattern was used as the test software.

The program was executed as follows :

a. Turn on the power of all equipment.
b. The PC reads the test program from the hard disk drive and runs it.
c. The PC sends scrolling " H " pattern to the monitor, and the monitor displays scrolling " H" patterns on the screen.
d. The PC sends " H " messages to the printer, then the printer prints them on the paper.
e. The PC sends signal messages to the modem.
f. The PC sends signal messages to the internal Hard Disk, and the Hard Disk reads and writes the message.
g. Repeat the steps from c to f.

At the same time, “AMCAP,exe ” was executed to keep scanning.

4. General Information of Test

4.1. Test Facility

Test Site Location : No. 3, Lane 238, Kang Lo Street, Nei Hwu District, Taipei 11424, Taiwan, R.O.C.
TEL : 886-2-2631-4739
FAX : 886-2-2631-9740
Test Site No. : CO01-NH, OS01-NH

4.2. Test Voltage

AC 120V / 60Hz

4.3. Measurement Procedure

ANSI C63.4-2003

4.4. Test in Compliance with

ANSI C63.4 - 2003 and 47 CFR, Part 15, Subpart B

4.5. Frequency Range Investigated

a. Conducted emission test: from 150 kHz to 30 MHz
b. Radiated emission test: from 30 MHz to 1,000 MHz

4.6. Test Distance

The test distance of radiated emission test from antenna to EUT is 10 M.

5. Test of Conducted Powerline

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meter above the ground plane as shown in section 5.3. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

5.1. Description of Major Test Instruments

● Test Receiver	(R&S ESCS 30)
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

5.2. Test Procedures

a. The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meters from any other grounded conducting surface.

b. Connect EUT to the power mains through a line impedance stabilization network (LISN).

c. All the support units are connect to the other LISN.

d. The LISN provides 50 ohm coupling impedance for the measuring instrument.

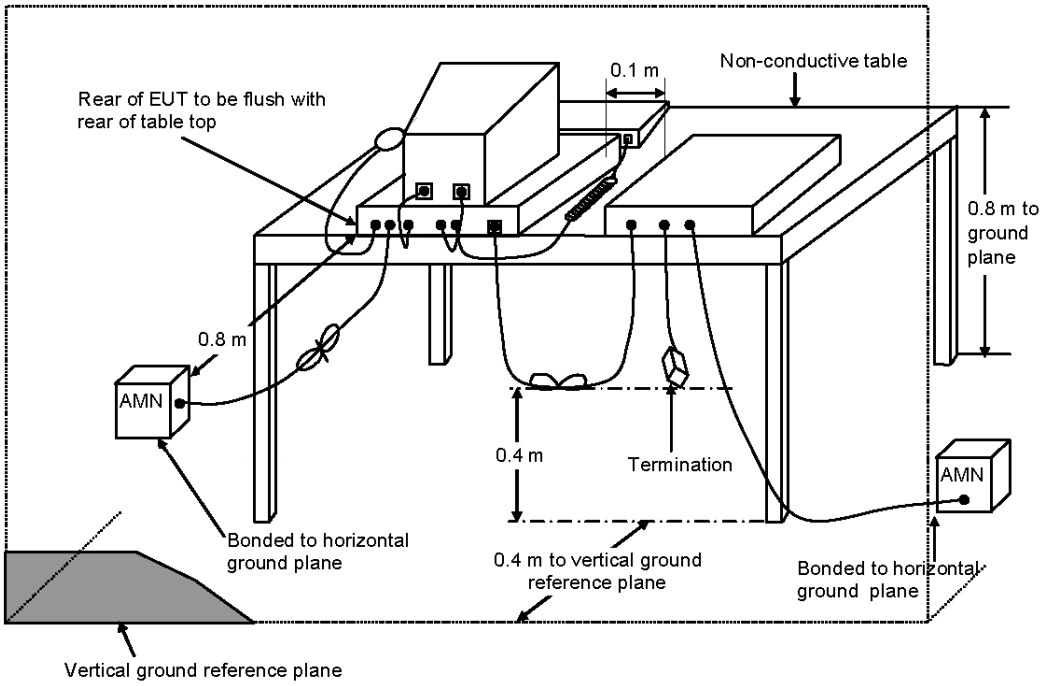
e. The FCC states that a 50 ohm, 50 microhenry LISN should be used.

f. Both sides of AC line were checked for maximum conducted interference.

g. The frequency range from 150 kHz to 30 MHz was searched.

h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.3. Typical Test Setup Layout of Conducted Powerline

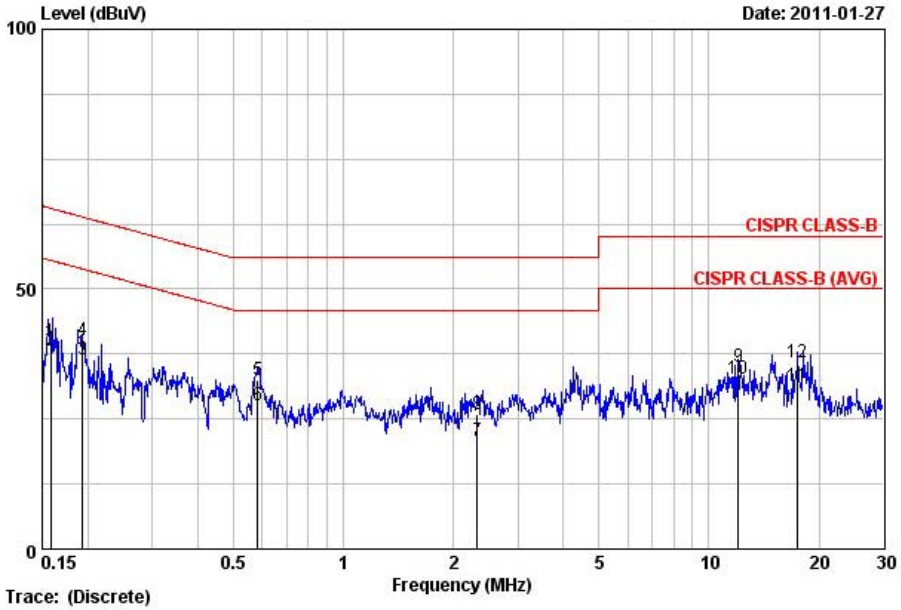


5.4. Test Result of AC Powerline Conducted Emission

Test Mode	Mode 1		
Test Frequency	0.15 MHz ~ 30 MHz	**Test Site No.**	CO01-NH
Test Voltage	AC 120V / 60Hz	**Test Engineer**	Eddie
Temperature	21 ℃	**Relative Humidity**	50 %

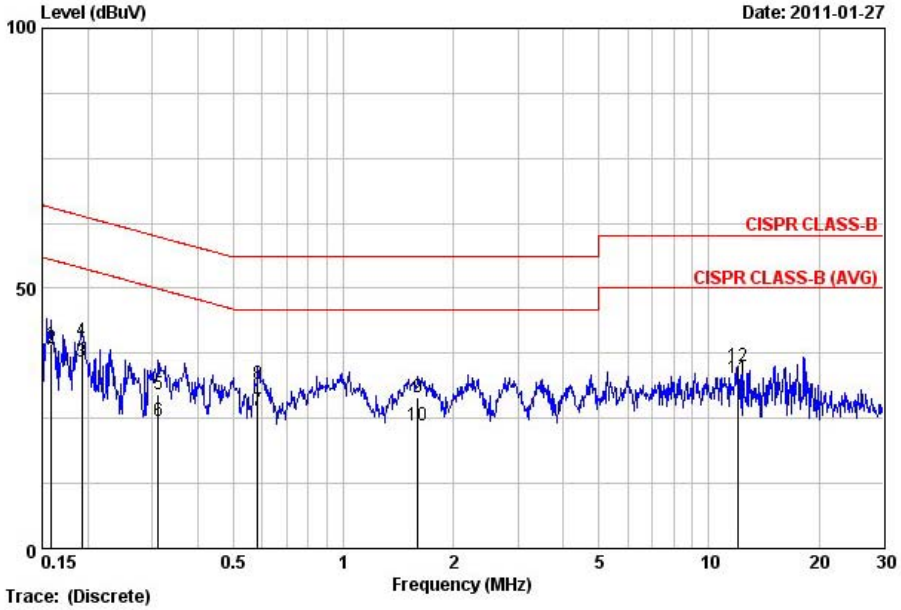
Note: 1. Corrected Reading (dBμV) = LISN Factor + Cable Loss + Read Level = Level
2. All emissions not reported here are more than 10 dB below the prescribed limit.

■ **The test was passed at the minimum margin that marked by the frame in the following data**



Site : CO01-NH
Condition : CISPR CLASS-B 2011-NNB41-04/10153 LINE
eut :
power : From System
memo :
memo :
memo :
memo :

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.159	39.81	-25.73	65.54	29.67	10.04	0.10	QP
2	0.159	38.22	-17.32	55.54	28.08	10.04	0.10	AVERAGE
3	0.193	36.60	-17.29	53.89	26.47	10.03	0.10	AVERAGE
4	0.193	40.04	-23.85	63.89	29.91	10.03	0.10	QP
5	0.584	32.51	-23.49	56.00	22.36	10.04	0.10	QP
6	0.584	27.64	-18.36	46.00	17.49	10.04	0.10	AVERAGE
7	2.321	20.66	-25.34	46.00	10.39	10.07	0.20	AVERAGE
8	2.321	25.82	-30.18	56.00	15.55	10.07	0.20	QP
9	12.044	35.13	-24.87	60.00	24.66	10.22	0.25	QP
10 @	12.044	32.86	-17.14	50.00	22.39	10.22	0.25	AVERAGE
11	17.479	31.20	-18.80	50.00	20.61	10.29	0.30	AVERAGE
12	17.479	35.88	-24.12	60.00	25.29	10.29	0.30	QP



Trace: (Discrete)

Site : CO01-NH
Condition : CISPR CLASS-B 2011-NNB41-04/10153 NEUTRAL
eut :
power : From System
memo :
memo :
memo :
memo :

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.159	39.20	-26.33	65.53	29.12	9.98	0.10	QP
2 @	0.159	38.60	-16.93	55.53	28.52	9.98	0.10	AVERAGE
3	0.192	36.04	-17.89	53.93	25.96	9.98	0.10	AVERAGE
4	0.192	39.91	-24.02	63.93	29.83	9.98	0.10	QP
5	0.312	29.67	-30.26	59.93	19.58	9.99	0.10	QP
6	0.312	24.46	-25.47	49.93	14.37	9.99	0.10	AVERAGE
7	0.582	26.60	-19.40	46.00	16.51	9.99	0.10	AVERAGE
8	0.582	31.56	-24.44	56.00	21.47	9.99	0.10	QP
9	1.602	29.10	-26.90	56.00	18.93	10.00	0.17	QP
10	1.602	23.71	-22.29	46.00	13.54	10.00	0.17	AVERAGE
11 @	12.042	32.89	-17.11	50.00	22.48	10.16	0.25	AVERAGE
12	12.042	34.91	-25.09	60.00	24.50	10.16	0.25	QP

6. Test of Radiated Emission

Radiated emissions from 30 MHz to 1,000 MHz were measured with a bandwidth of 120 kHz according to the methods defines in ANSI C63.4-2003. The EUT was placed on a nonmetallic stand, 0.8 meter above the ground plane, as shown in section 6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

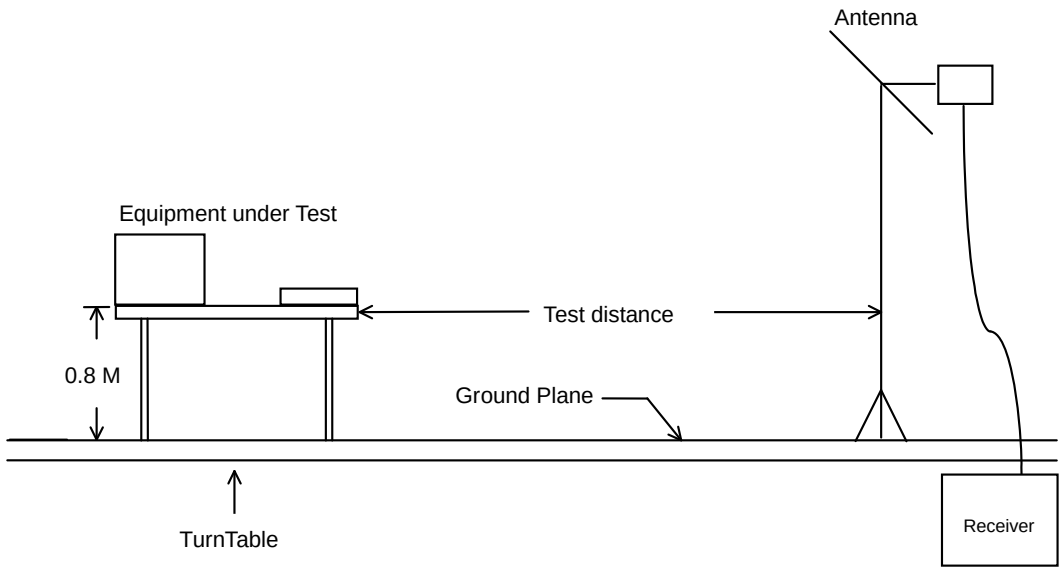
6.1. Description of Major Test Instruments

• Amplifier	(HP 8447D)
RF Gain	25 dB
Signal Input	0.1 MHz - 1.0 GHz
• Spectrum Analyzer	(R&S FSP)
Attenuation	10 dB
Start Frequency	30 MHz
Stop Frequency	1000 MHz
Resolution Bandwidth	120 kHz
Signal Input	9 kHz - 7 GHz
• Test Receiver	(R&S ESCS 30)
Resolution Bandwidth	120 kHz
Frequency Band	9 kHz - 2.75 GHz
Quasi-Peak Detector	ON for Quasi-Peak Mode
	OFF for Peak Mode

6.2. Test Procedures

a. The EUT was placed on a rotatable table top 0.8 meter above ground.
b. The EUT was set 10 meters from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
c. The table was rotated 360 degrees to determine the position of the highest radiation.
d. The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
h. The FCC Part 15.109 (g) permit parties seeking to authorize a digital device to choose to demonstrate that the device complies with either the Part 15 standards or the international standards found in Publication 22 of the International Special Committee on Radio Interference (CISPR).

6.3. Typical Test Setup Layout of Radiated Emission



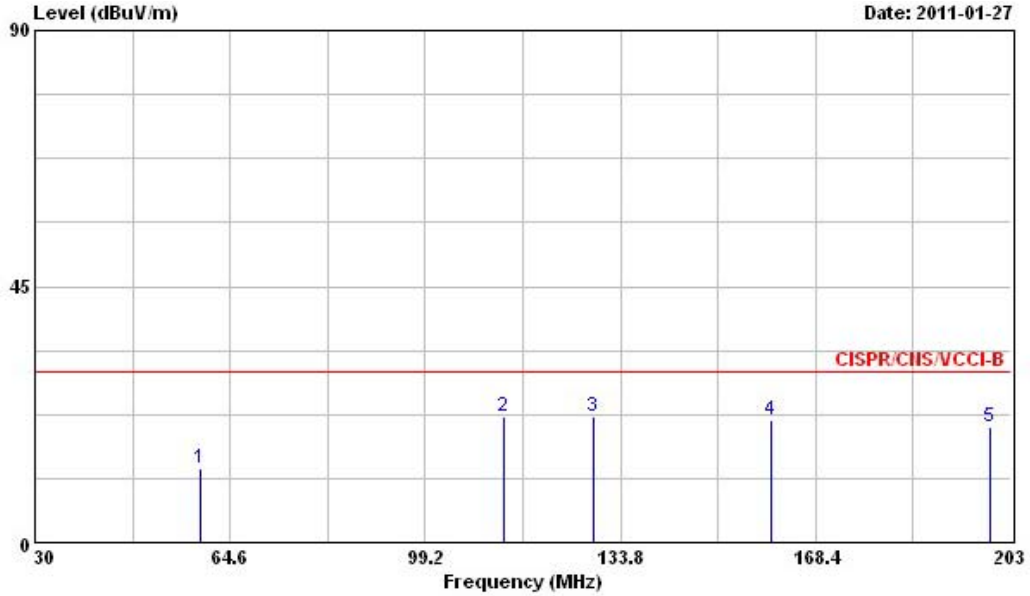
6.4. Test Result of Radiated Emission

Test mode	Mode 1	**Test Site No.**	OS01-NH
Test frequency	30 MHz ~ 1000 MHz	**Test Engineer**	Cash
Antenna distance	10 meters	**Test Voltage**	AC 120V / 60Hz
Temperature	25 ℃	**Relative Humidity**	53 %

Note: 1. Emission level (dBμV/m) = 20 log Emission level (μV/m)

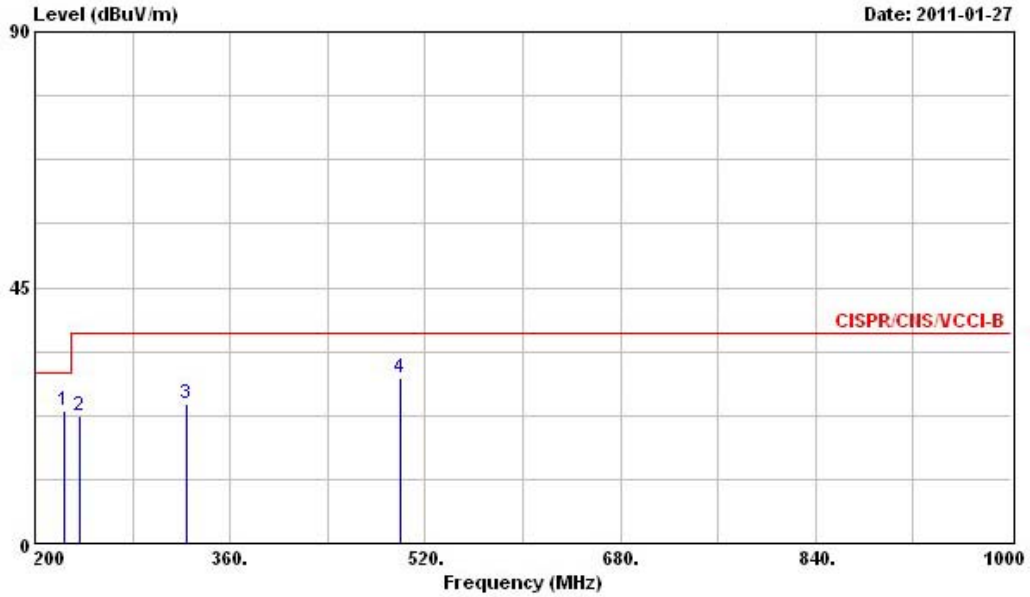
2. Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level

■ **The test was passed at the minimum margin that marked by the frame in the following data**



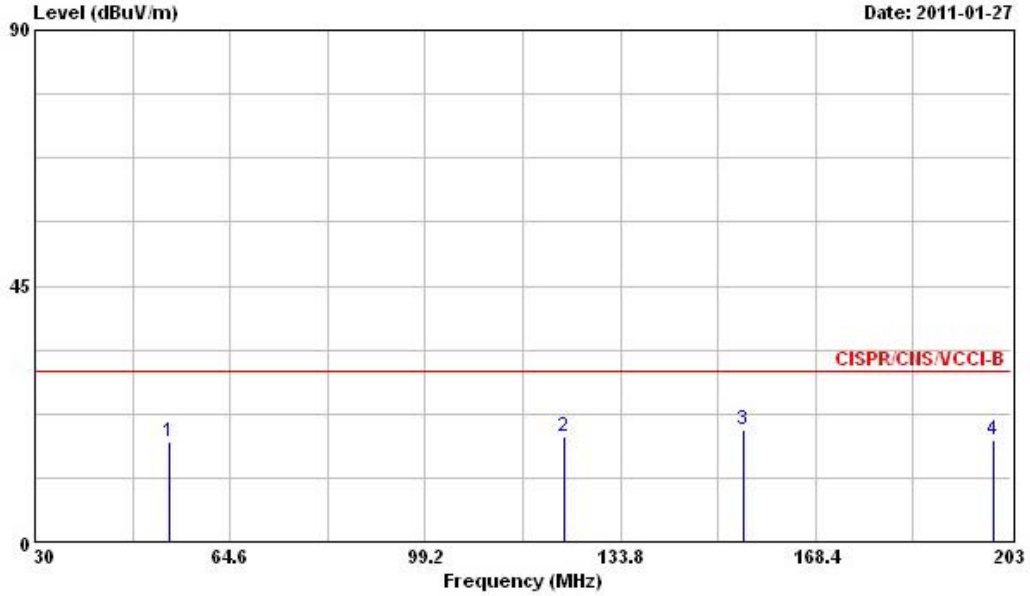
Site : OS01-NH
Condition : CISPR/CNS/VCCI-B 10m OS01-ANT-01-20-2011 VERTICAL
EUT :
POWER : FROM SYSTEM
MEMO :

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	59.410	13.10	-16.90	30.00	33.15	6.27	1.16	27.48	Peak	---	---
2	113.210	21.98	-8.02	30.00	36.82	11.00	1.49	27.33	Peak	---	---
3	128.960	22.19	-7.81	30.00	36.14	11.67	1.63	27.25	Peak	---	---
4	160.440	21.40	-8.60	30.00	36.22	10.38	1.90	27.10	Peak	---	---
5	199.370	20.25	-9.75	30.00	36.10	8.85	2.20	26.90	Peak	---	---



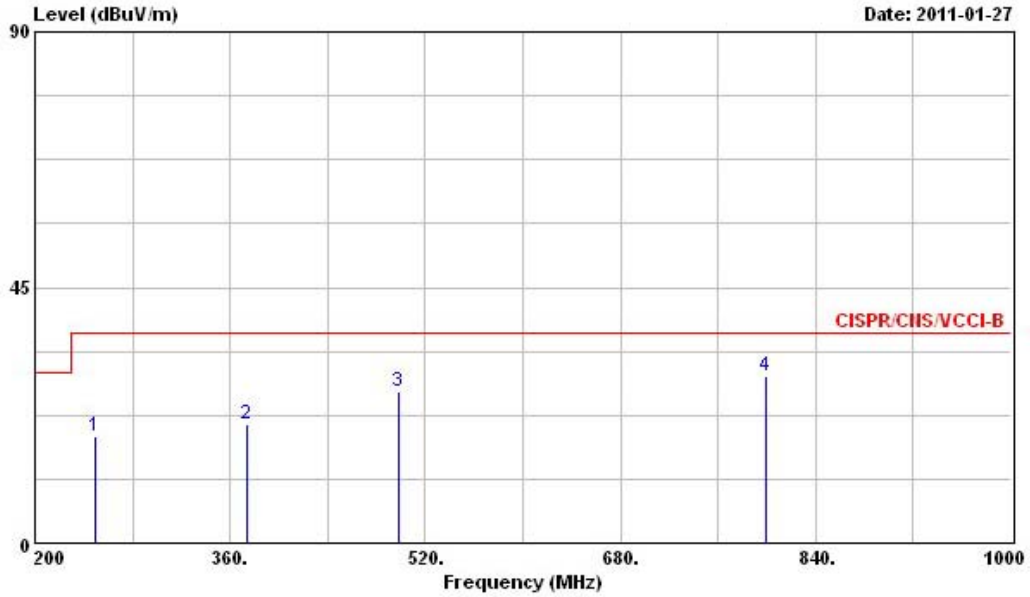
Site : OS01-NH
Condition : CISPR/CNS/VCCI-B 10m OS01-ANT-01-20-2011 VERTICAL
EUT :
POWER : FROM SYSTEM
MEMO :

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 @	224.000	23.47	-6.53	30.00	37.37	10.59	2.36	26.85	Peak	100	0
2	236.800	22.47	-14.53	37.00	35.33	11.50	2.47	26.83	Peak	---	---
3	324.000	24.68	-12.32	37.00	34.70	13.99	2.88	26.89	Peak	---	---
4	499.200	28.98	-8.02	37.00	34.60	18.36	4.11	28.09	Peak	---	---



Site : OS01-NH
Condition : CISPR/CNS/VCCI-B 10m OS01-ANT-01-20-2011 HORIZONTAL
EUT :
POWER : FROM SYSTEM
MEMO :

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	53.870	17.64	-12.36	30.00	36.77	7.25	1.11	27.49	Peak	---	---
2	123.770	18.57	-11.43	30.00	32.64	11.67	1.54	27.28	Peak	---	---
3	155.770	19.73	-10.27	30.00	34.30	10.67	1.88	27.12	Peak	---	---
4	200.060	17.93	-12.07	30.00	33.78	8.85	2.20	26.90	Peak	---	---



Site : OS01-NH
Condition : CISPR/CNS/VCCI-B 10m OS01-ANT-01-20-2011 HORIZONTAL
EUT :
POWER : FROM SYSTEM
MEMO :

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	249.600	18.87	-18.13	37.00	30.74	12.40	2.53	26.80	Peak	---	---
2	374.400	21.05	-15.95	37.00	29.90	15.20	3.25	27.30	Peak	---	---
3	497.600	26.59	-10.41	37.00	32.27	18.31	4.09	28.08	Peak	---	---
4	799.200	29.25	-7.75	37.00	29.39	22.06	5.90	28.10	Peak	---	---

7. List of Measuring Equipment Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Receiver	R&S	ESCS 30	100357	9 kHz - 2.75 GHz	Nov. 16, 2010	Conduction (CO01-NH)
LISN	SCHAFFNER	NNB41	04/10153	9kHz – 30MHz	Nov. 16, 2010	Conduction (CO01-NH)
Power Filter	CORCOM	MR12030	N/A	30A*2	N/A	Conduction (CO01-NH)
RF Cable-CON	Suhner Switzerland	RG223/U	CB004	9kHz – 30MHz	Dec. 14, 2010	Conduction (CO01-NH)
Open Area Test Site	SPORTON	OATS-10	OS01-NH	30 MHz - 1 GHz 10m	Nov. 15, 2010	Radiation (OS01-NH)
Amplifier	HP	8447D	2944A06292	0.1 MHz - 1.3 GHz	Apr. 20, 2010	Radiation (OS01-NH)
Spectrum Analyzer	R&S	FSP	838858/038	9 kHz – 7 GHz	Jan. 11, 2011	Radiation (OS01-NH)
Receiver	R&S	ESCS 30	100167	9 kHz - 2.75 GHz	Jul. 19, 2010	Radiation (OS01-NH)
Bilog Antenna	SCHAFFNER	CBL6111C	2738	30 MHz - 1 GHz	Jan. 17, 2011	Radiation (OS01-NH)
Turn Table	EMCO	1060-1.211	9507-1805	0 - 360 degree	N/A	Radiation (OS01-NH)
Antenna Mast	EMCO	1051-1.2	9503-1876	1 m - 4 m	N/A	Radiation (OS01-NH)
RF Cable-R10m	BELDEN	RG8/U	CB001	30 MHz - 1 GHz	Nov. 14, 2010	Radiation (OS01-NH)

※ Calibration Interval of instruments listed above is one year.

8. Uncertainty of Test Site

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.20	Normal(k=2)	0.10
Cable loss	0.19	Normal(k=2)	0.10
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.75	Rectangular	1.01
Mismatch	+0.44/-0.46	U-shape	0.32
combined standard uncertainty Uc(y)	**1.31**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.62**		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.17	Normal(k=2)	0.09
Antenna factor calibration	0.96	Normal(k=2)	0.48
Cable loss calibration	0.19	Normal(k=2)	0.10
Pre Amplifier Gain calibration	0.21	Normal(k=2)	0.11
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.76	Rectangular	1.02
Mismatch	+0.36/-0.38	U-shaped	0.26
combined standard uncertainty Uc(y)	**1.40**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.80**		