FCC TEST REPORT

for

47 CFR FCC Rules and Regulations Part 15 Subpart B,

Class B Digital

Equipment : FilmScan35 II-Professional-2.4

Model No. : SCND902H1235

FCC ID : WFZSCND902H1235

Filing Type : Certification

Applicant : **EU3C Company Limited**
Unit7, 8/F., Austin Tower, 22-26 Austin Avenue, Tsim Sha Tsui, Kowloon, Hong Kong

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: Dec. 06, 2010

■ No additional attachment.

☐ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

Certificate No. : FV0O0901

CERTIFICATE OF COMPLIANCE

for

47 CFR FCC Rules and Regulations Part 15 Subpart B,

Class B Digital Device

Equipment	:	FilmScan35 II-Professional-2.4
Model No.	:	SCND902H1235
FCC ID	:	WFZSCND902H1235
Applicant	:	EU3C Company Limited Unit7, 8/F., Austin Tower, 22-26 Austin Avenue, Tsim Sha Tsui, 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 the energy emitted by this equipment was ***passed*** **FCC Part 15 Subpart B** in both radiated and conducted emission class B limits.
Testing was carried out on Dec. 02, 2010 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
Unit7, 8/F., Austin Tower, 22-26 Austin Avenue, Tsim Sha Tsui, Kowloon, Hong Kong.

1.2. Manufacturer

Silicon Valley Electronice Technology (Dongguan) Co., LTD
He Iu Second Industrial Section, Huangjiang Town, Dongguan City, Guang Dong Province

1.3. Basic Description of Equipment under Test

Equipment	: FilmScan35 II-Professional-2.4
Model No.	: SCND902H1235
Trade Name	: FS-II-9M-2.4
USB Cable	: Shielded, 1.2m,
Video Cable	: Non-Shielded, 3m
Power Supply Type	: Switching Adaptor
AC Power Cord	: Non-Shielded, 1.2m, 2 pin

1.4. Feature of Equipment under Test

Please refer to user manual.

2. Test Configuration of Equipment under Test

2.1. Test Manner

a. The EUT has been associated with peripheral pursuant 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 SONY TV, DELL PC, DELL monitor, DELL Keyboard, DELL Mouse, APPLE IPOD, HP Printer and EUT for EMI test.

c. The following modes were performed:
Mode 1. Scan
Mode 2. Play
Mode 3. Scan + USB charge
For Conduction test, cause “mode 2” generated the worst test result, they were reported as final data.
For Radiation test, cause “mode 1” generated the worst test result, they were reported as final data.

d. Frequency range investigated: conduction 150 KHz to 30 MHz, radiation 30 MHz to 1000MHz.

2.2. Description of Test System

Support Unit 1. -- TV (SONY)

FCC ID	: DOC
Model No.	: KLV-32V300A
Power Supply Type	: Linear
Power Cord	: Non-Shielded, 1.8m, 3 pin
Serial No.	: N/A
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 2. -- Personal Computer (DELL)

FCC ID	: DOC
Model No.	: OPTIPLEX320
Power Supply Type	: Switching
Power Cord	: Non-Shielded，1.8m
Serial No.	: N/A
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 3. -- USB Keyboard (DELL)

FCC ID	: DOC
Model No.	: L100
Serial No.	: N/A
Data Cable	: Shielded, with core, 1.8m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 4. -- USB Mouse (DELL)

FCC ID	: DOC
Model No.	: N231
Serial No.	: N/A
Data Cable	: Shielded, 1.8m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 5. -- iPod (APPLE)

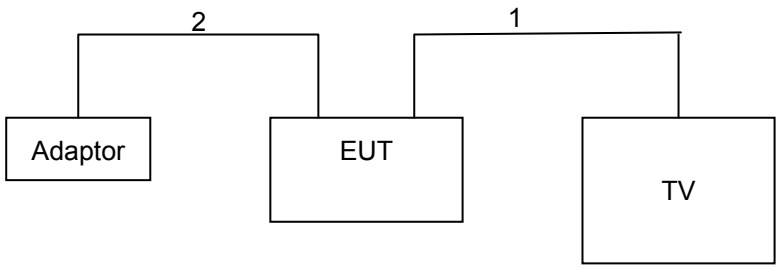
FCC ID	: DOC
Model No.	: A1199
Serial No.	: YM73117LVQ5
Data Cable	: Shielded, 1.2m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 6. -- Printer (HP)

FCC ID	: DOC
Model No.	: Laser Jet 1018
Power Supply Type	: Linear
Power Cord	: Non-Shielded
Serial No.	: N/A
Data Cable	: Shielded, 1.8m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

2.3. Connection Diagram of Test System

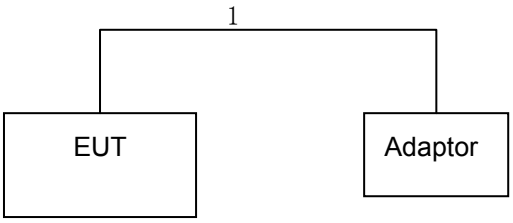
For Conduction test



1. The video cable is connected from EUT to the support unit 1.
2. The USB cable is connected from EUT to the Adaptor.

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

For Radiation test



1. The USB cable is connected from EUT to the adaptor.

3. Test Software

An executive program, “EMCTEST.EXE” under WIN XP, which generates a complete line of continuously An executive program, “EMITEST.EXE” under WIN XP, which generates a complete line of continuously repeating “ H “ pattern was used as the test software in the mode 3.

The program was executed as follows :

a. Scanner carries out the scanning modem.
b. Scanner connects TV and broadcasts the pictures.
c. Scanner connects PC and charges, then carries out the scanning modem .

4. General Information of Test

4.1. Test Facility

This test was carried out by SPORTON International Inc.

Test Site Location : No.3-2 Ping-Xiang Rd,
Kunshan Economic & Technical Development Zone, JiangSu, China.
TEL : 86-0512-57900158
FAX : 86-0512-57900958

Test Site No. : CO01-KS, 03CH01-KS

4.2. Test Voltage

AC 120V / 60Hz

4.3. Standard for Methods of Measurement

ANSI C63.4-2003

4.4. Test in Compliance with

FCC Rules, Regulations Part 15 Subpart B

4.5. Frequency Range Investigated

a. Conduction: from 150 kHz to 30 MHz

b. Radiation: from 30 MHz to 1000 MHz

4.6. Test Distance

The test distance of radiated emission from antenna to EUT is 3 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 meters 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.

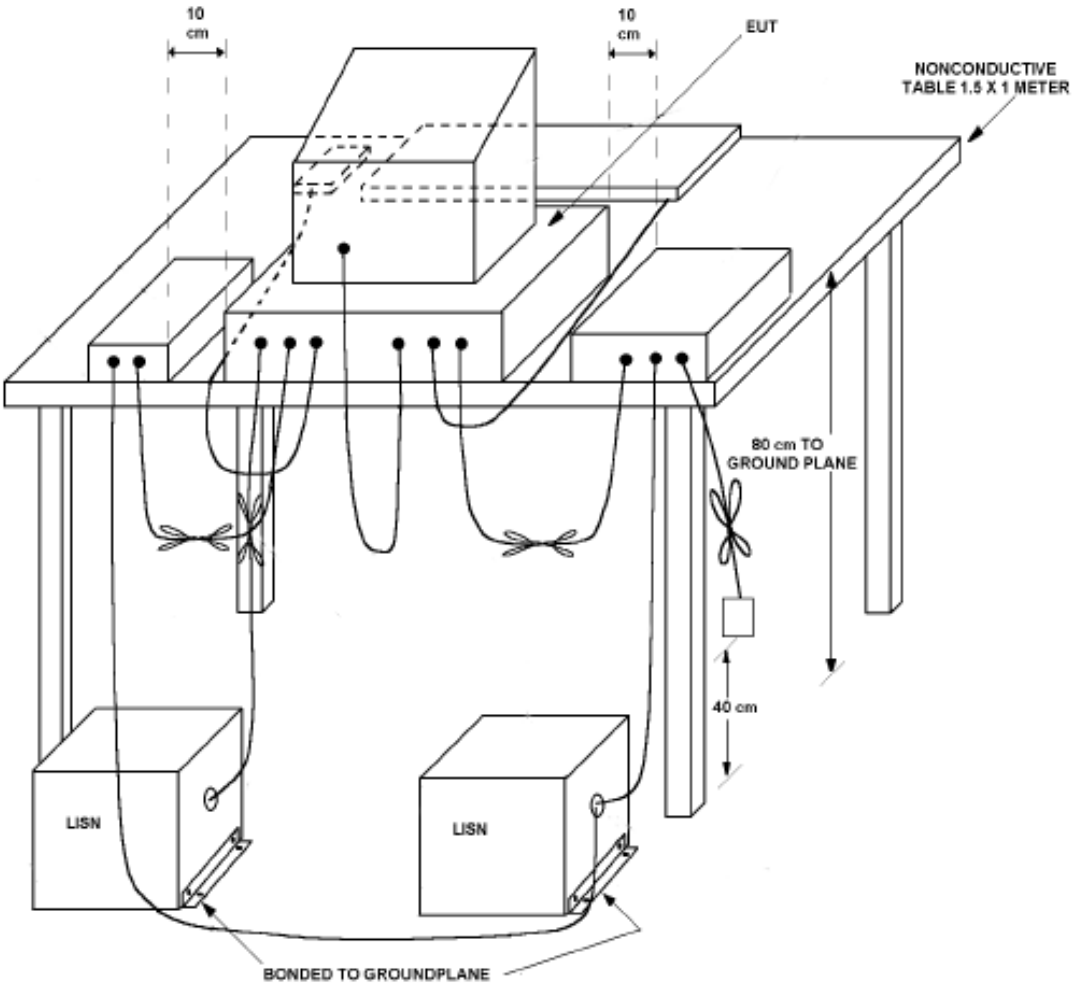
5.1. Major Measuring Instruments

● Test Receiver	(R&S ESCI7)
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 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
c. The LISN provides 50 ohm coupling impedance for the measuring instrument.
d. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
e. Both sides of AC line were checked for maximum conducted interference.
f. The frequency range from 150 kHz to 30 MHz was searched.
g. 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

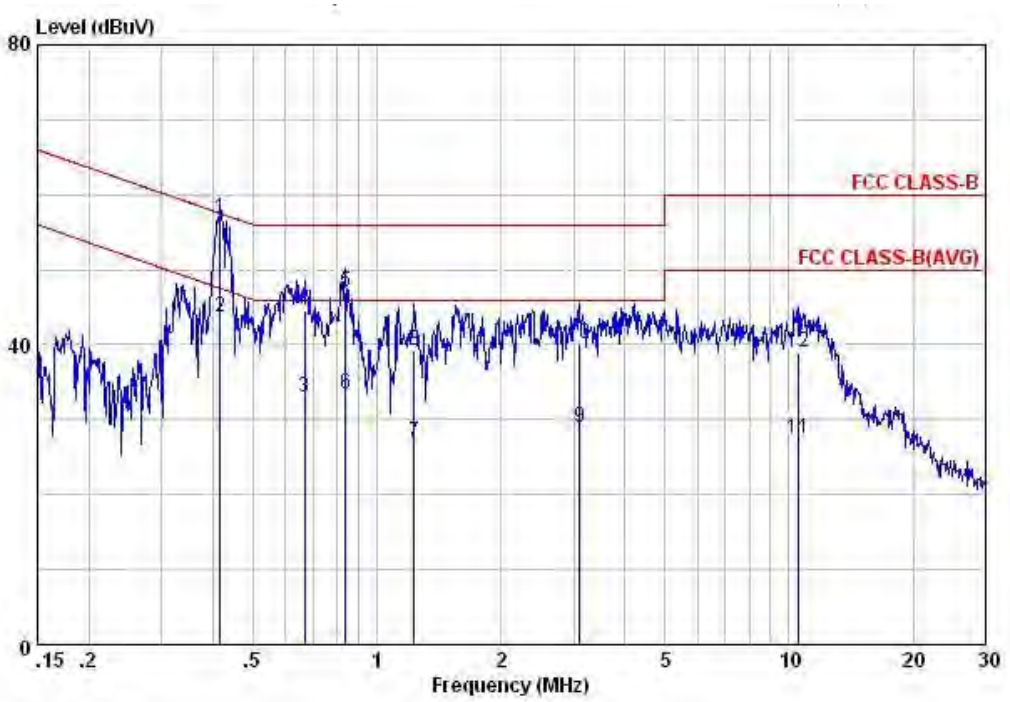


5.4. Test Result of AC Powerline Conducted Emission

5.4.1. Test Mode: Mode 2

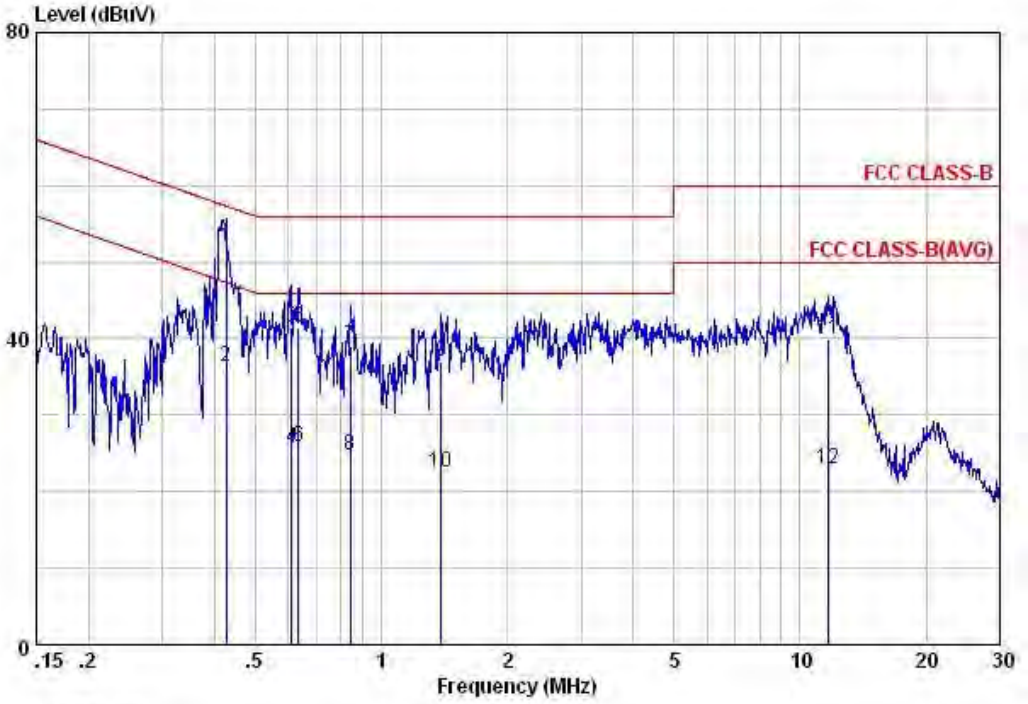
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 23 ℃
- Relative Humidity: 44 %
- Corrected Reading (dBuV) = Probe Factor + Cable Loss + Read Level = Level
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test was passed at the minimum margin that marked by the frame in the following table.



Condition: FCC CLASS-B LISN-100807 NEUTRAL
EUT : Film scan 35 II-professional-2.4
Model : SCND902H1232
Power : 120Vac/60Hz
Memo : Play

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.42	56.71	-0.79	57.50	46.60	-0.08	10.19	QP
2	0.42	43.71	-3.79	47.50	33.60	-0.08	10.19	Average
3	0.67	32.95	-13.05	46.00	22.80	-0.08	10.23	Average
4	0.67	44.65	-11.35	56.00	34.50	-0.08	10.23	QP
5	0.84	46.96	-9.04	56.00	36.80	-0.09	10.25	QP
6	0.84	33.46	-12.54	46.00	23.30	-0.09	10.25	Average
7	1.23	26.99	-19.01	46.00	16.80	-0.09	10.28	Average
8	1.23	39.29	-16.71	56.00	29.10	-0.09	10.28	QP
9	3.11	29.05	-16.95	46.00	18.80	-0.12	10.37	Average
10	3.11	40.05	-15.95	56.00	29.80	-0.12	10.37	QP
11	10.51	27.44	-22.56	50.00	17.11	-0.13	10.46	Average
12	10.51	39.04	-20.96	60.00	28.71	-0.13	10.46	QP



Condition: FCC CLASS-B LISN-100807 LINE
EUT : Film scan 35 II-protessional-2.4
Model : SCND902H1232
Power : 120Vac/60Hz
Memo : Play

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.43	51.92	-5.41	57.33	41.80	-0.08	10.20	QP
2	0.43	36.22	-11.11	47.33	26.10	-0.08	10.20	Average
3	0.61	41.34	-14.66	56.00	31.21	-0.09	10.22	QP
4	0.61	25.74	-20.26	46.00	15.61	-0.09	10.22	Average
5	0.63	41.44	-14.56	56.00	31.30	-0.09	10.23	QP
6	0.63	25.94	-20.06	46.00	15.80	-0.09	10.23	Average
7	0.84	38.95	-17.05	56.00	28.80	-0.10	10.25	QP
8	0.84	24.65	-21.35	46.00	14.50	-0.10	10.25	Average
9	1.39	37.09	-18.91	56.00	26.90	-0.10	10.29	QP
10	1.39	22.49	-23.51	46.00	12.30	-0.10	10.29	Average
11	11.62	39.98	-20.02	60.00	29.60	-0.10	10.48	QP
12	11.62	22.88	-27.12	50.00	12.50	-0.10	10.48	Average

est Engineer : James Huang

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.

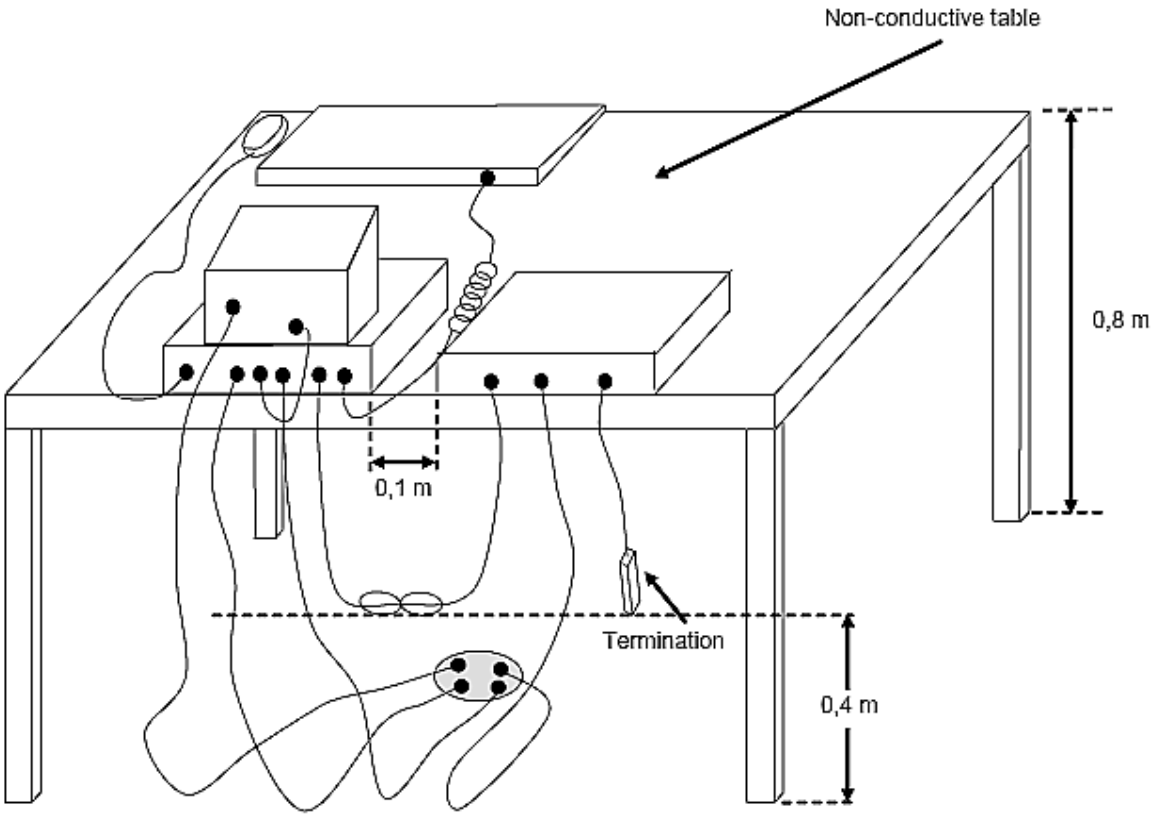
6.1. Major Measuring Instruments

● Amplifier	Wireless (FPA-6592G)
RF Gain	28 dB
Signal Input	30MHz~2GHz
● EMI Receiver	(R&S ESCI)
Attenuation	10 dB
Start Frequency	30 MHz
Stop Frequency	1000 MHz
Resolution Bandwidth	120 kHz
Signal Input	9 kHz - 3 GHz
● Bilog Antenna	SCHAFFNER (CBL6112D)
Start Frequency	30 MHz
Stop Frequency	1 GHz
Signal Input	25MHz~2GHz

6.2. Test Procedures

a. The EUT was placed on a rotatable table top 0.8 meter above ground.
b. The EUT was set 3 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 dipol e and its height is varie d between one m eter and four meters above ground to find the maximum value of the field st rength both hori zontal po larization an d 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-receive r sy stem to Peak Detect Function and specified ban dwidth with Maxim um Hol d 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.

6.3. Typical Test Setup Layout of Radiated Emission

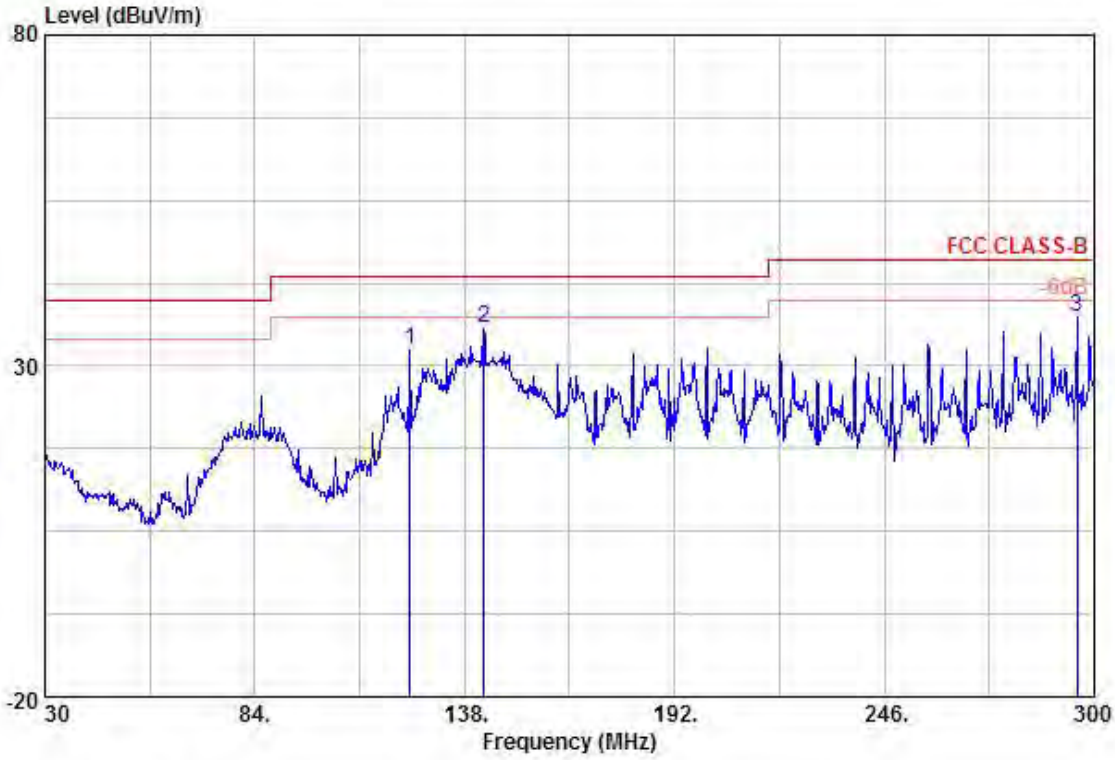


6.4. Test Result of Radiated Emission

6.4.1. Test Mode: Mode 1

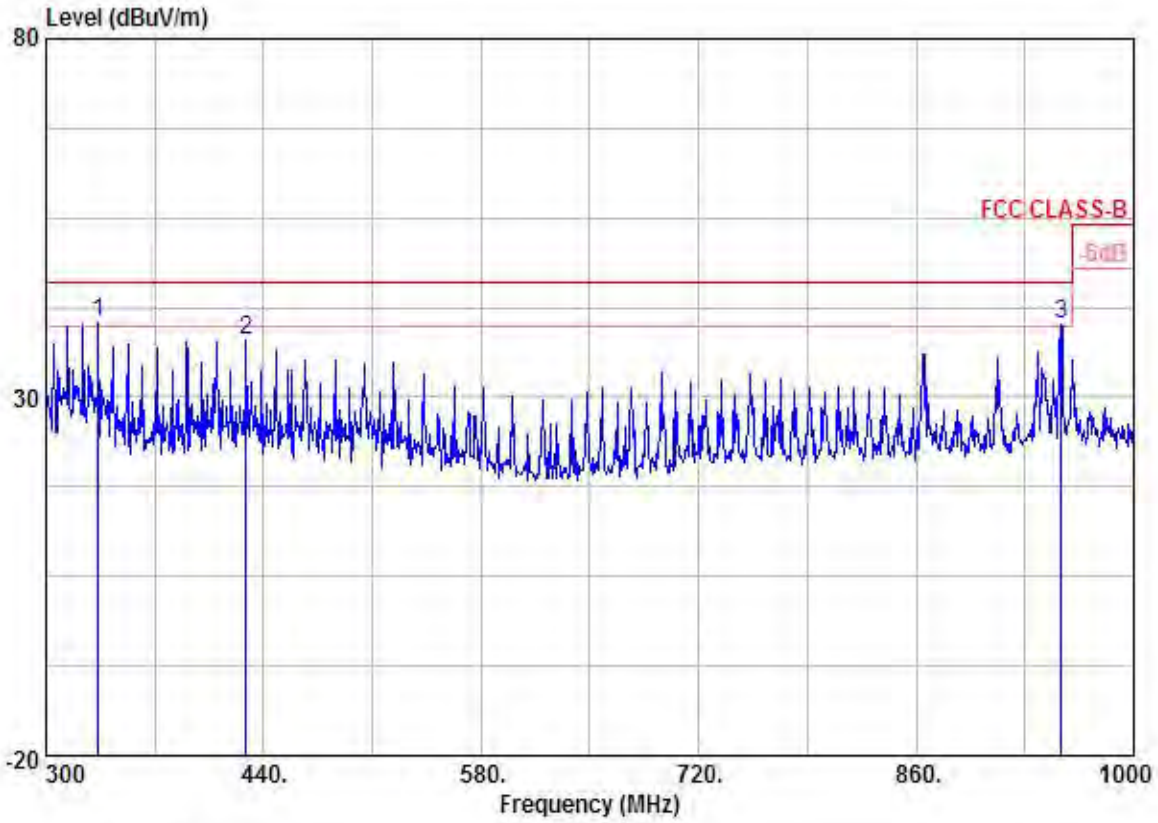
- Frequency Range of Test: from 30 MHz to 1,000 MHz
- Temperature : 22 ℃
- Relative Humidity : 43 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level

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



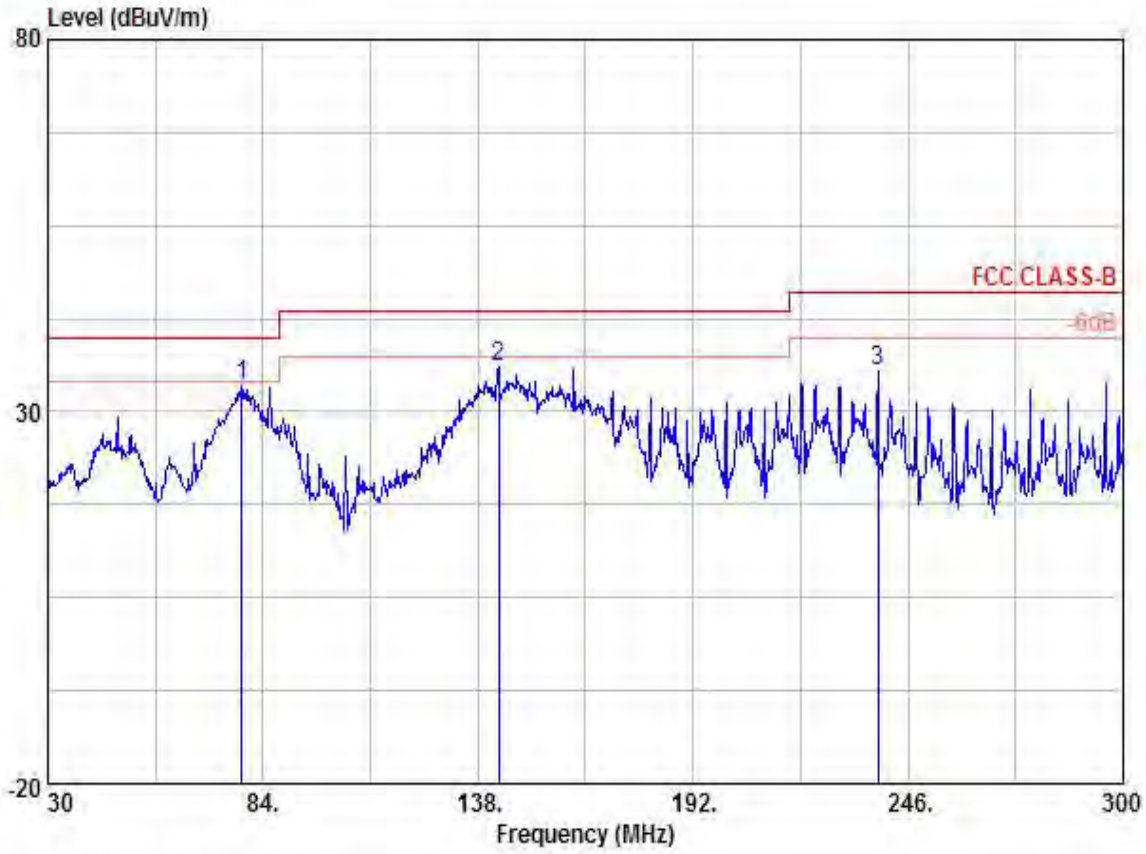
Condition: FCC CLASS-B 3m LF_ANT_100803 HORIZONTAL
EUT : Film scan 35 II-protessional-2.4
Model : SCND902H1232
Power : 120V/60Hz
Memo : Scan

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	123.96	32.39	-11.11	43.50	50.60	11.76	0.48	30.45	---	---	Peak
2	142.86	35.58	-7.92	43.50	54.66	10.64	0.57	30.29	---	---	Peak
3	295.68	37.46	-8.54	46.00	53.41	12.95	0.78	29.68	---	---	Peak



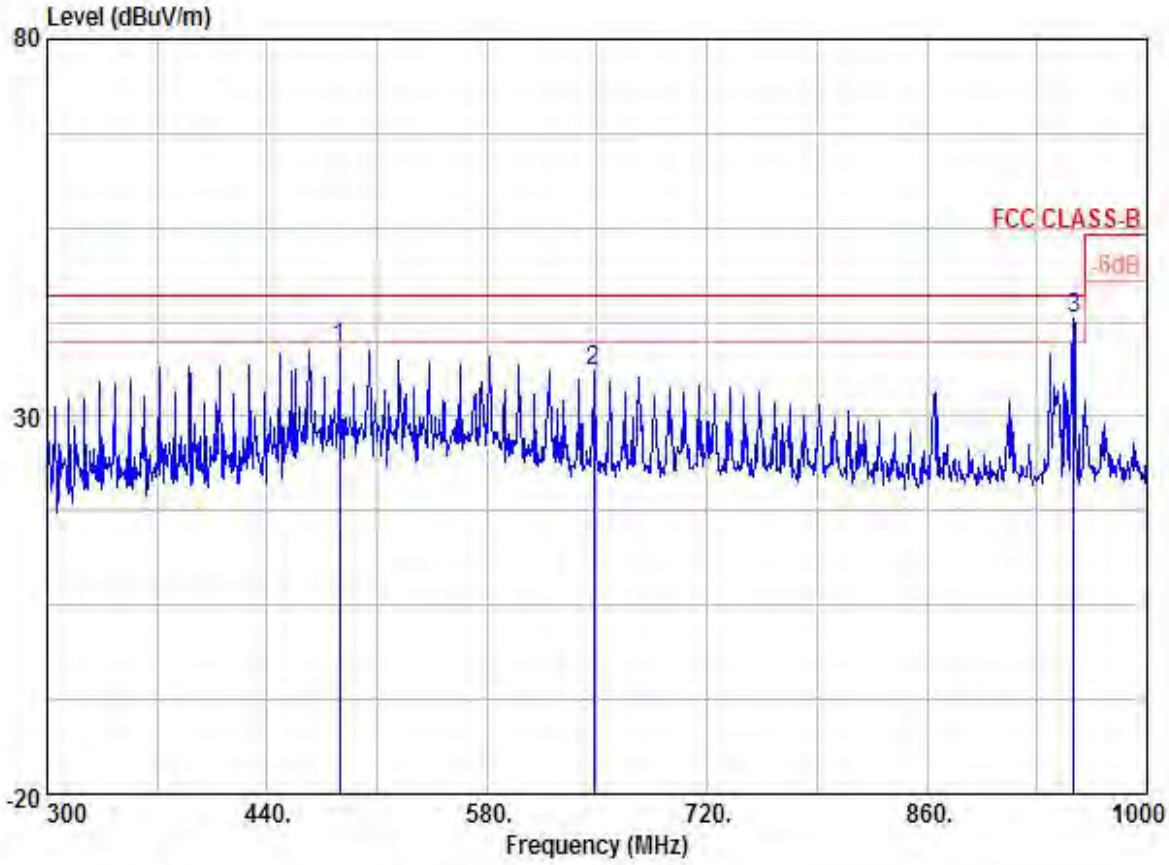
Condition: FCC CLASS-B 3m LF_ANT_100803 HORIZONTAL
EUT : Film scan 35 II-protessional-2.4
Model : SCND902H1232
Power : 120V/60Hz
Memo : Scan

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	!	333.60	40.31	-5.69	46.00	55.36	14.08	0.81	29.94	128	314	Peak
2		428.80	37.88	-8.12	46.00	51.59	16.18	0.90	30.79	---	---	Peak
3	!	953.10	40.21	-5.79	46.00	46.86	20.75	1.32	28.72	---	---	Peak



Condition: FCC CLASS-B 3m LF_ANT_100803 VERTICAL
EUT : Film scan 35 II-protessional-2.4
Model : SCND902H1232
Power : 120V/60Hz
Memo : Scan

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	78.60	33.54	-6.46	40.00	57.51	6.34	0.38	30.69	---	---	Peak
2	143.13	35.85	-7.65	43.50	55.02	10.55	0.57	30.29	---	---	Peak
3	238.44	35.40	-10.60	46.00	52.96	11.46	0.71	29.73	---	---	Peak



Condition: FCC CLASS-B 3m LF_ANT_100803 VERTICAL
EUT : Film scan 35 II-protessional-2.4
Model : SCND902H1232
Power : 120V/60Hz
Memo : Scan

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		486.20	38.97	-7.03	46.00	52.30	16.99	0.97	31.29	---	---	Peak
2		647.90	36.11	-9.89	46.00	47.71	18.89	1.10	31.59	---	---	Peak
3	!	953.10	42.84	-3.16	46.00	49.49	20.75	1.32	28.72	114	225	Peak

Test Engineer : James Huang

7. List of Measuring Equipment Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 16, 2010	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Jan. 18, 2010	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060004	30MHz~2GHz	Feb. 02, 2010	Radiation (03CH01-KS)
EMI Test Receicver	R&S	ESCI7	100768	9kHz~7GHz	Jun. 22, 2010	Conduction (CO01-KS)
LISN	MessTec	AN3016	060103	9kHz~30MHz	Jan. 18, 2010	Conduction (CO01-KS)
LISN	MessTec	AN3016	060105	9kHz~30MHz	Jan. 18, 2010	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	N/A	Nov. 10, 2010	Conduction (CO01-KS)

※ 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	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	**1.13**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.26**		

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

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.27	Normal(k=2)	0.14
Antenna factor calibration	0.92	Normal(k=2)	0.46
Cable loss calibration	0.16	Normal(k=2)	0.08
Pre Amplifier Gain calibration	0.17	Normal(k=2)	0.09
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.99	Rectangular	1.15
Mismatch	+0.50/-0.54	U-shaped	0.37
combined standard uncertainty Uc(y)	**1.52**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**3.04**		