

# EMC TEST REPORT

Test item : LED LCD TV monitor  
Model No. : 32LM3400-UC  
Order No. : 1203-00050  
Date of receipt : 2012-03-14  
Test duration : 2012-03-21 ~ 2012-03-22  
Use of report : FCC CoC Marking  
Date of Issue : 2012-03-26

Applicant : LG Electronics Inc.

19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Test laboratory : Digital EMC Co., Ltd.

683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

Test specification : ANSI C 63.4:2003  
FCC Part 15 Subpart B  
(Type of Device : Class B Personal Computers  
and Peripherals (JBP))

Test environment : Temperature : (20 ~ 24) °C,  
Humidity : (35 ~ 41) % R.H.

Test result :  Comply  Not Comply

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.


This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:



Engineer  
H.J.KIM

Reviewed by:



Manager  
M.J.SONG

The above test report is the accredited test results by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

**PRESIDENT OF DIGITAL EMC CO., LTD.**

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## 1. General Remarks

This report contains the result of tests performed by:

**DIGITAL EMC CO., LTD.**

Address : 683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

<http://www.digitalemc.com>

Tel: +82-31-321-2664 Fax: +82-31-321-1664

## 2. Test Laboratory

Digital EMC Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1124C	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

### 3. General Information of EUT

Model No.	32LM3400-UC
EUT Type	LED LCD TV monitor
Serial No	NONE
FCC ID	BEJ32LM3400UC
Type of Sample Tested	Pre-Production
High Frequency	667 MHz
Rating	AC100-240 V~, 50/60 Hz
Supplied Power for Test	AC120 V, 60 Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

#### Related Submittal(s) / Grant(s)

**Original submittal only.**

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
720 x 400	31.469	70.08
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1360 x 768	47.712	60.015

## 4. Test Summary

### 4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2003	C
Radiated Disturbance	ANSI C63.4:2003	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

### 4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (°C)	Humidity (% R.H.)	Pressure (hPa)
Conducted Disturbance	03-21	24	37	-
	03-21	20	41	
Radiated Disturbance	03-22	22	37	
	03-22	21	35	

### 4.3 Test result Summary

#### (1) Conducted Emission(HDMI MODE)

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
0.15753	L1	60.5	Quasi-Peak	65.6	5.1

#### (2) Radiated Emission(HDMI MODE)

Frequency [MHz]	Pol.	Result [dB( $\mu$ V/m)]	Detector	Limit [dB( $\mu$ V/m)]	Margin [dB]
661.122	H	41.8	Quasi-Peak	46.0	4.2

## 5. Test Set-up and operation mode

### 5.1 Principle of Configuration Selection

**Emission** : The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 5.2 Test Operation Mode

- HDMI MODE – Resolution : 1360 x 768 Resolution (Worst Case)
- USB MODE

### 5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	shield		
PC	DCSCMF	G3RZKBX	DELL	POWER	1.8	Non-shield	Plastic	DOC
				HDMI	1.8	Shield		
				USB	1.8	Shield		
				PS/2	1.8	Shield		
KEYBOARD	SKG-3000UB	TAKSB24503Y	MONITEREY INTERNATIONAL CORP	USB	1.8	Shield	Plastic	DOC
MOUSE	SML-510PB	TAKS903519Z	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Non-shield Non-shield	Plastic	VER
USB MEMORY	JEWERLY	N/A	AXXEN	USB	-	-	-	DOC
PRINTER	SPR-770	N/A	N/A	POWER	1.8	Non-shield	Plastic	DOC
				USB	1.6	Shield		

## 6. Test Results : Emission

### 6.1 Conducted Disturbance

#### 6.1.1 Measurement Procedure

In the range of 0.15MHz to 30MHz, the conducted disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is table top equipment, it was placed on a wooden table with a height of 0.8m above the reference ground plane and 0.4m from the conducting wall of the shielded room.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15m above the reference ground plane.

Connect the EUT's power source lines to the appropriate power mains / peripherals through the LISN. All the other peripherals are connected to the 2<sup>nd</sup> LISN, if any.

Unused measuring port of the LISN was resistively terminated by 50 ohm terminator.

The measuring port of the LISN for EUT was connected to spectrum analyzer.

Using conducted emission test software, the emissions were scanned with peak detector mode.

After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and Average detector.

By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.

For further description of the configuration refer to the picture of the test set-up.

#### 6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB( $\mu$ V)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50

Note 1 The lower limit shall apply at the transition frequencies.  
 Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

Test Result

< HDMI MODE >



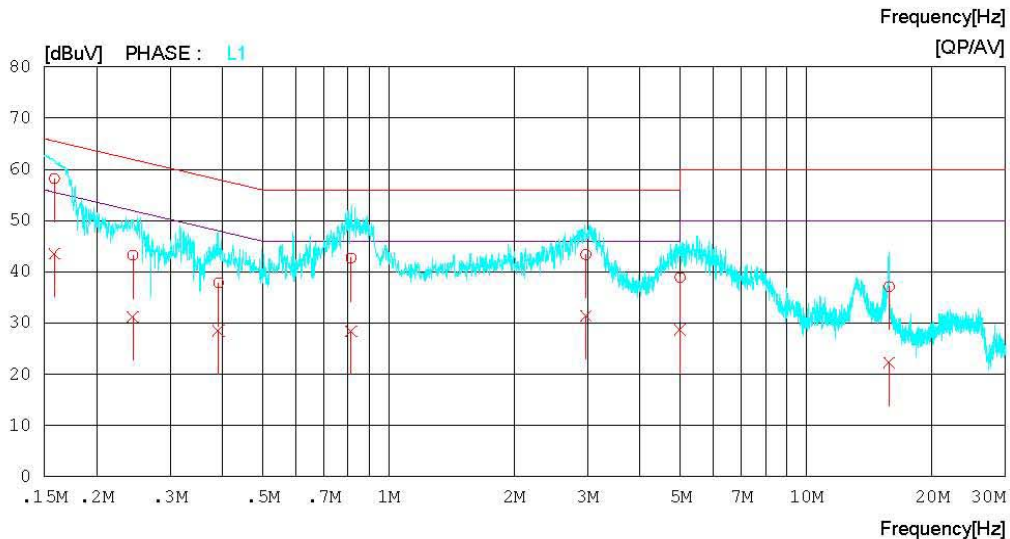
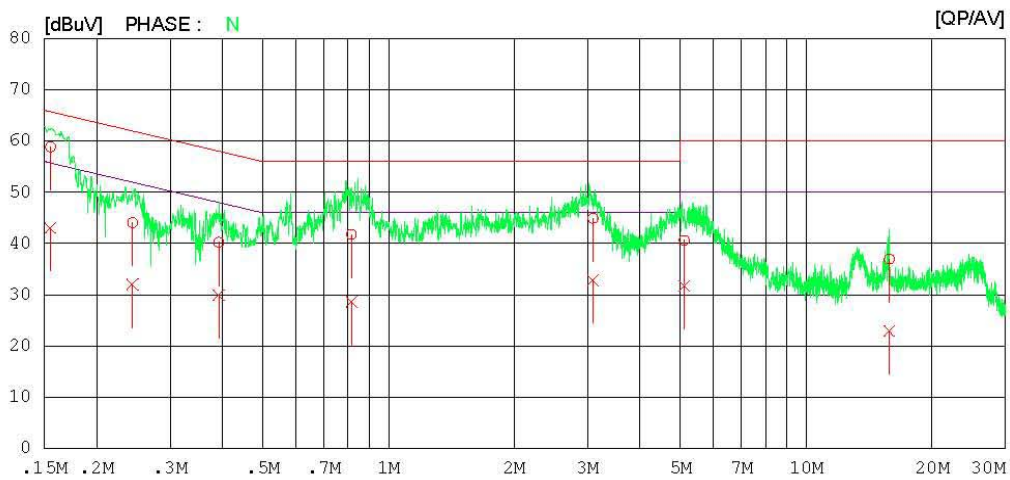
Results of Conducted Emission

Digital EMC  
Date : 2012-03-21

Model No.	: 32LM3400-UC	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 24 °C 37 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2012-03-21

Model No. :	32LM3400-UC	Reference No. :	
Type :		Power Supply :	120 V 60 Hz
Serial No. :		Temp/Humi. :	24 °C 37 % R.H
Test Condition :	HDMI	Operator :	

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15520	58.5	42.7	0.3	58.8	43.0	65.7	55.7	6.9	12.7	N
2	0.24395	43.9	31.8	0.2	44.1	32.0	62.0	52.0	17.9	20.0	N
3	0.39244	39.9	29.6	0.3	40.2	29.9	58.0	48.0	17.8	18.1	N
4	0.81564	41.4	28.3	0.3	41.7	28.6	56.0	46.0	14.3	17.4	N
5	3.08850	44.5	32.5	0.4	44.9	32.9	56.0	46.0	11.1	13.1	N
6	5.10650	40.2	31.3	0.4	40.6	31.7	60.0	50.0	19.4	18.3	N
7	15.80450	35.9	21.9	1.0	36.9	22.9	60.0	50.0	23.1	27.1	N
8	0.15863	57.9	43.3	0.3	58.2	43.6	65.5	55.5	7.3	11.9	L1
9	0.24419	43.0	31.0	0.2	43.2	31.2	62.0	52.0	18.8	20.8	L1
10	0.39164	37.6	28.2	0.3	37.9	28.5	58.0	48.0	20.1	19.5	L1
11	0.81408	42.4	28.1	0.3	42.7	28.4	56.0	46.0	13.3	17.6	L1
12	2.96900	43.1	31.1	0.3	43.4	31.4	56.0	46.0	12.6	14.6	L1
13	4.98950	38.5	28.3	0.4	38.9	28.7	56.0	46.0	17.1	17.3	L1
14	15.80300	36.1	21.3	1.0	37.1	22.3	60.0	50.0	22.9	27.7	L1

< USB MODE >



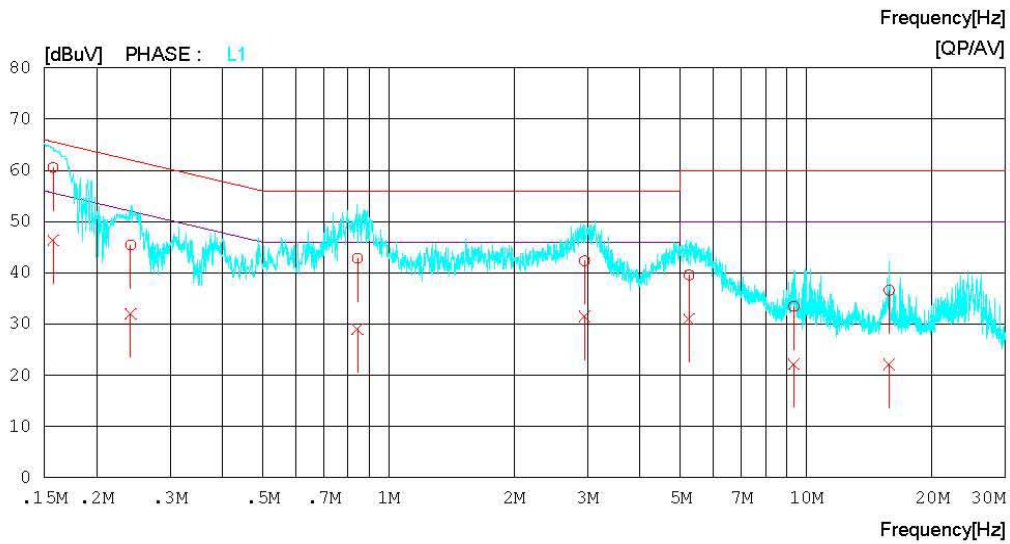
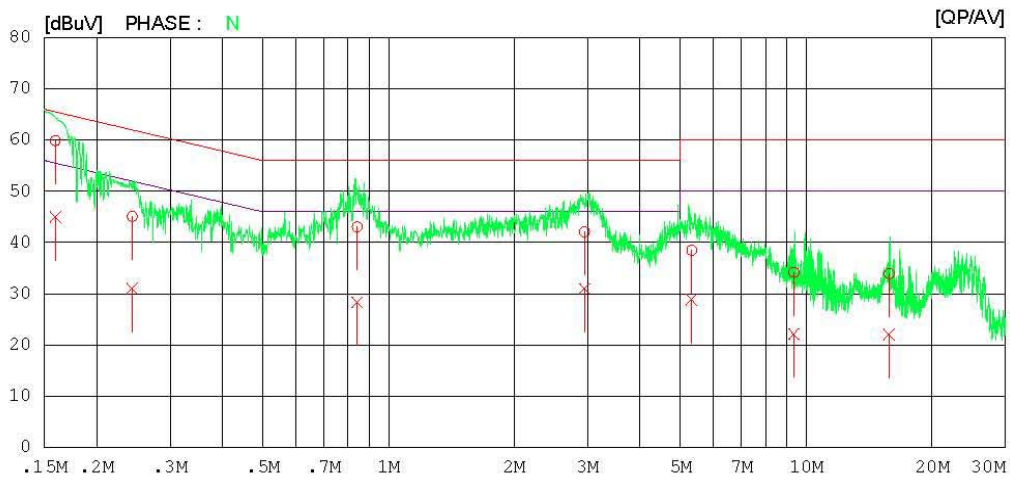
### Results of Conducted Emission

Digital EMC  
 Date : 2012-03-21

Model No. : 32LM3400-UC  
 Type :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi. : 20°C 41% R.H.  
 Operator :

Memo :  
 LIMIT : CISPR22\_B QP  
 CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2012-03-21

Model No. : 32LM3400-UC  
 Type :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi. : 20°C 41% R.H.  
 Operator :

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15939	59.6	44.6	0.3	59.9	44.9	65.5	55.5	5.6	10.6	N
2	0.24363	44.9	30.8	0.2	45.1	31.0	62.0	52.0	16.9	21.0	N
3	0.84125	42.7	28.1	0.3	43.0	28.4	56.0	46.0	13.0	17.6	N
4	2.94750	41.8	30.6	0.3	42.1	30.9	56.0	46.0	13.9	15.1	N
5	5.31900	38.1	28.5	0.4	38.5	28.9	60.0	50.0	21.5	21.1	N
6	9.34750	33.6	21.5	0.6	34.2	22.1	60.0	50.0	25.8	27.9	N
7	15.80050	32.9	21.0	1.0	33.9	22.0	60.0	50.0	26.1	28.0	N
8	0.15753	60.2	46.0	0.3	60.5	46.3	65.6	55.6	5.1	9.3	L1
9	0.24130	45.2	31.8	0.2	45.4	32.0	62.1	52.1	16.7	20.1	L1
10	0.84283	42.5	28.7	0.3	42.8	29.0	56.0	46.0	13.2	17.0	L1
11	2.94850	42.0	31.1	0.3	42.3	31.4	56.0	46.0	13.7	14.6	L1
12	5.24300	39.2	30.6	0.4	39.6	31.0	60.0	50.0	20.4	19.0	L1
13	9.34650	32.8	21.6	0.6	33.4	22.2	60.0	50.0	26.6	27.8	L1
14	15.79700	35.6	21.1	1.0	36.6	22.1	60.0	50.0	23.4	27.9	L1

## 6.2 Radiated Disturbance

### 6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8m above the reference ground plane and 3m away from the interference receiving antenna in the **10m semi-anechoic chamber**.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15m above the reference ground plane.

Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4m above the reference ground plane continuously to determine associated with higher emission levels and record them.

The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

For below 1GHz frequency range, Quasi-Peak detector with 120kHz RBW was used.

Also Peak and Average detector with 1MHz RBW were used for above 1GHz frequency range.

For further description of the configuration refer to the picture of the test set-up.

## 6.2.2 Limit for Radiated Disturbance

- The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower

### (1) Limit for Radiated Emission below 1000MHz

Frequency range (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m distance)
	Quasi-peak (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.

Note 2 Additional provisions may be required for cases where interference occurs.

Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

Frequency range (MHz)	Class A Equipment (10m distance)	Class B Equipment (10m distance)
	Quasi-peak (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/m)
30 to 230	40	30
230 to 1000	47	37

### (2) Limits for Radiated Emission above 1000MHz at a measuring distance of 3m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)
1 to 40	80	60	74	54

Test Result

< HDMI MODE\_30 MHz ~ 1 GHz >

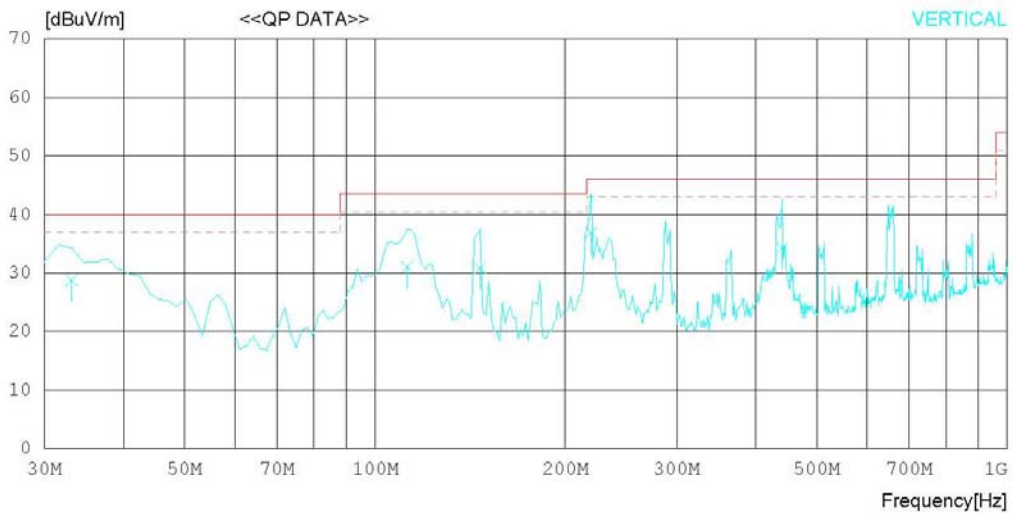
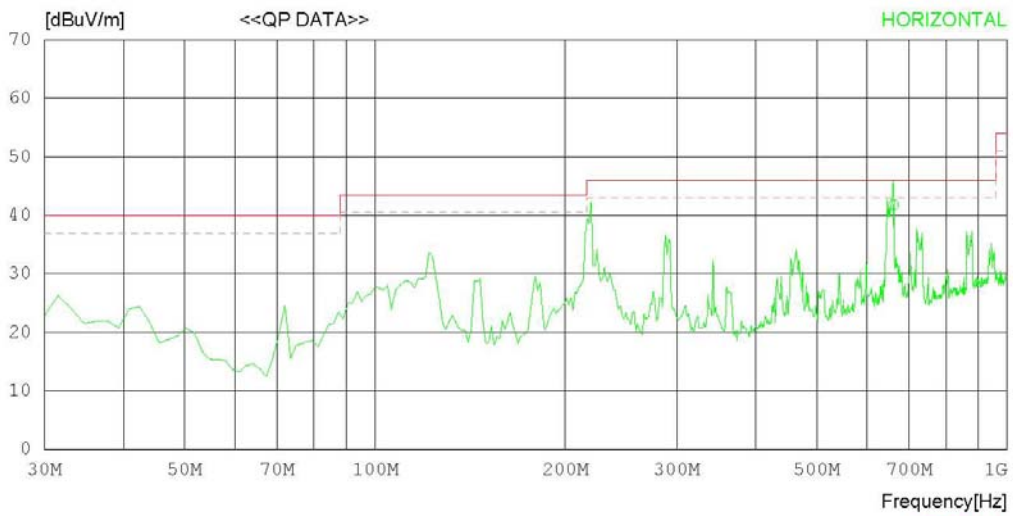
RADIATED EMISSION

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 22 °C 37 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)  
MARGIN: 3 dB



## RADIATED EMISSION

Date : 2012-03-22

Model Name : 32LM3400-UC  
 Model No. :  
 Serial No. :  
 Test Condition : HDMI

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi : 22 °C 37 % R.H  
 Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	661.122	42.0	20.2	4.0	24.4	41.8	46.0	4.2	200	358
----- Vertical -----										
2	33.109	33.7	17.3	0.9	23.1	28.8	40.0	11.2	100	358
3	112.388	41.4	11.0	1.5	22.8	31.1	43.5	12.4	100	228
4	146.587	41.1	11.2	1.7	23.1	30.9	43.5	12.6	100	3
5	219.648	47.9	10.2	2.2	23.4	36.9	46.0	9.1	100	204
6	440.383	39.0	16.7	3.2	24.6	34.3	46.0	11.7	100	358

< HDMI MODE\_1 GHz ~ 6 GHz\_Peak >

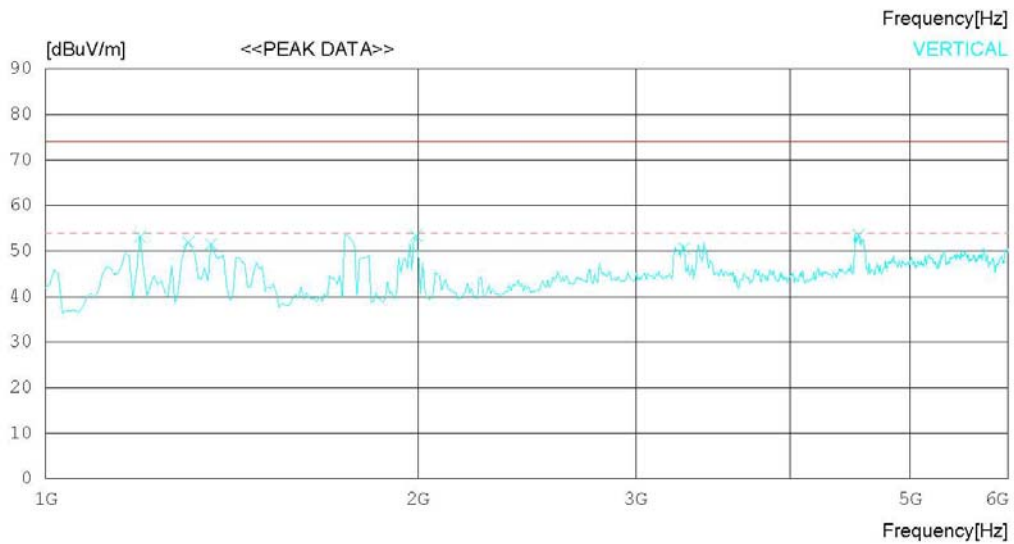
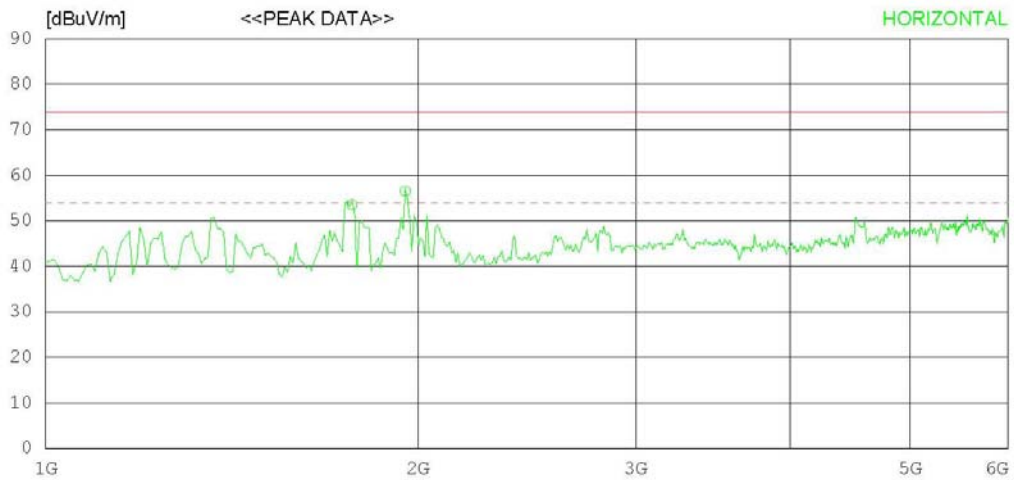
## RADIATED EMISSION

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 35 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



## RADIATED EMISSION

Date : 2012-03-22

Model Name : 32LM3400-UC	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 21 °C 35 % R.H
Test Condition : HDMI	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	1192.308	65.6	24.2	5.3	41.9	53.2	74.0	20.8	100	1
2	1304.487	63.9	24.5	5.4	41.8	52.0	74.0	22	100	1
3	1360.577	63.1	24.7	5.5	41.8	51.5	74.0	22.5	100	1
4	1993.589	62.9	25.2	7.0	41.7	53.4	74.0	20.6	100	50
5	3283.672	54.4	29.0	9.1	41.9	50.6	74.0	23.4	100	208
6	4541.690	53.9	30.9	10.7	42.0	53.5	74.0	20.5	100	182

< HDMI MODE\_1 GHz ~ 6 GHz\_Average >

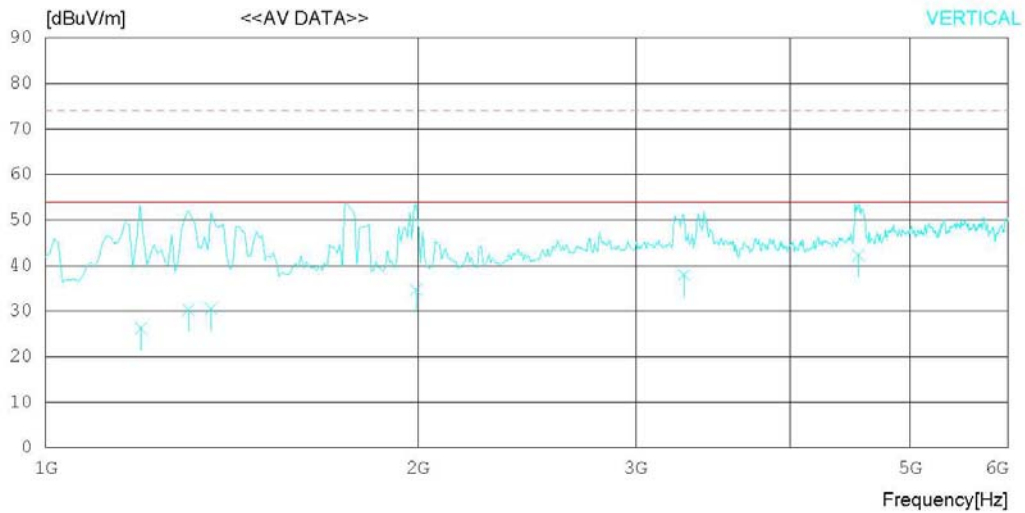
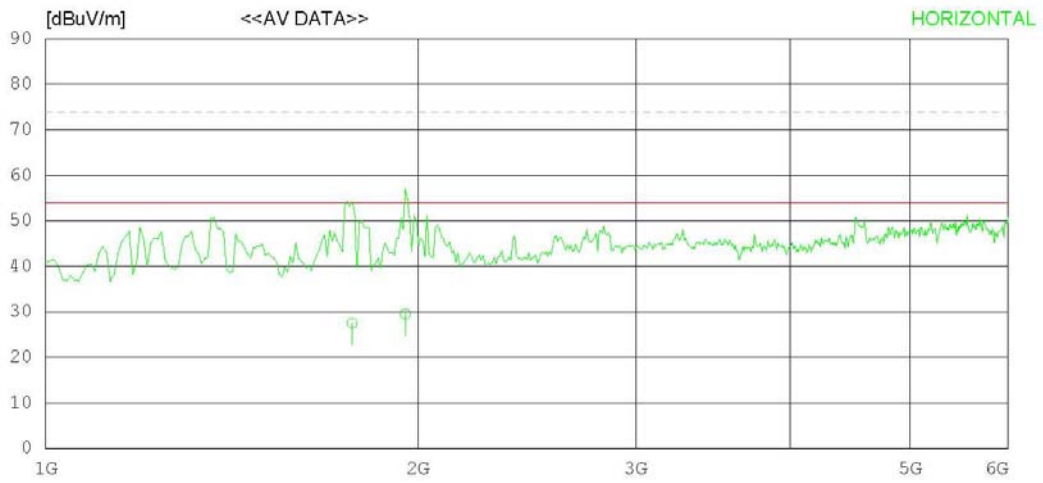
**RADIATED EMISSION**

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 35 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



## RADIATED EMISSION

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 35 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	1194.639	38.7	24.2	5.3	41.9	26.3	54.0	27.7	100	1
2	1304.487	42.1	24.5	5.5	41.8	30.3	54.0	23.7	100	1
3	1360.577	41.9	24.7	5.6	41.7	30.5	54.0	23.5	100	1
4	1993.589	44.1	25.2	7.0	41.7	34.6	54.0	19.4	100	50
5	3283.672	41.8	29.0	9.1	41.9	38.0	54.0	16.0	100	208
6	4541.690	42.7	30.9	10.7	42.0	42.3	54.0	11.7	100	182

< USB MODE\_30 MHz ~ 1 GHz >

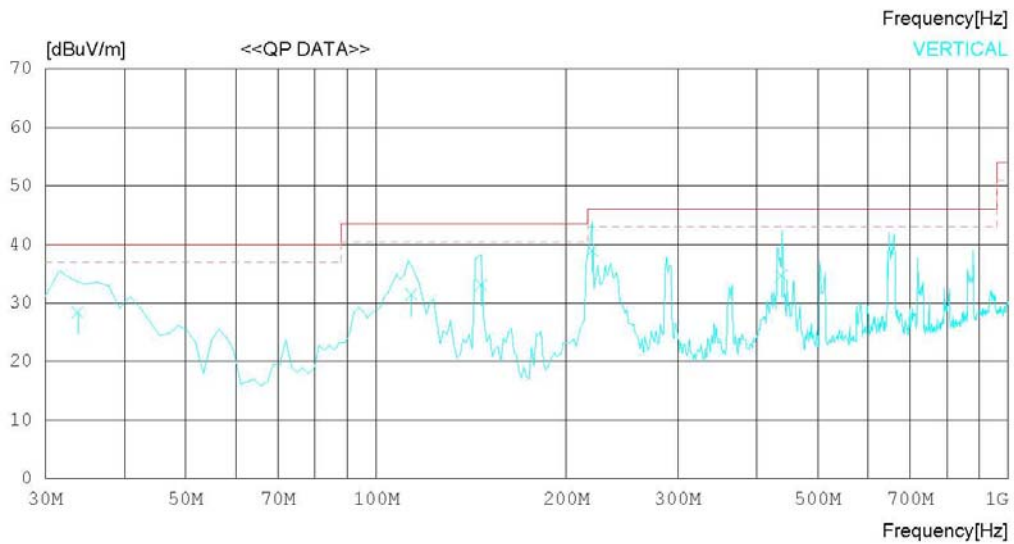
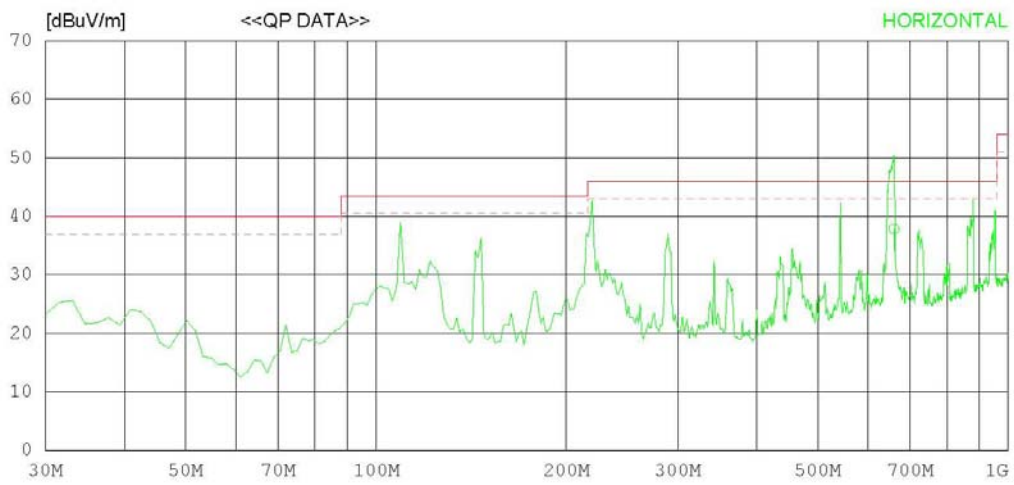
**RADIATED EMISSION**

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 22 'C 37 % R.H
Test Condition	: USB	Operator	:

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)  
MARGIN: 3 dB



## RADIATED EMISSION

Date : 2012-03-22

Model Name : 32LM3400-UC	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 37 % R.H
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	659.817	38.1	20.2	4.0	24.4	37.9	46.0	8.1	240	0
----- Vertical -----										
2	33.716	33.6	17.0	0.9	23.1	28.4	40.0	11.6	100	1
3	113.754	41.7	11.1	1.5	22.8	31.5	43.5	12.0	100	1
4	146.586	43.3	11.2	1.7	23.1	33.1	43.5	10.4	100	1
5	219.865	50.0	10.2	2.2	23.5	38.9	46.0	7.1	100	358
6	438.288	39.4	16.7	3.2	24.6	34.7	46.0	11.3	100	193

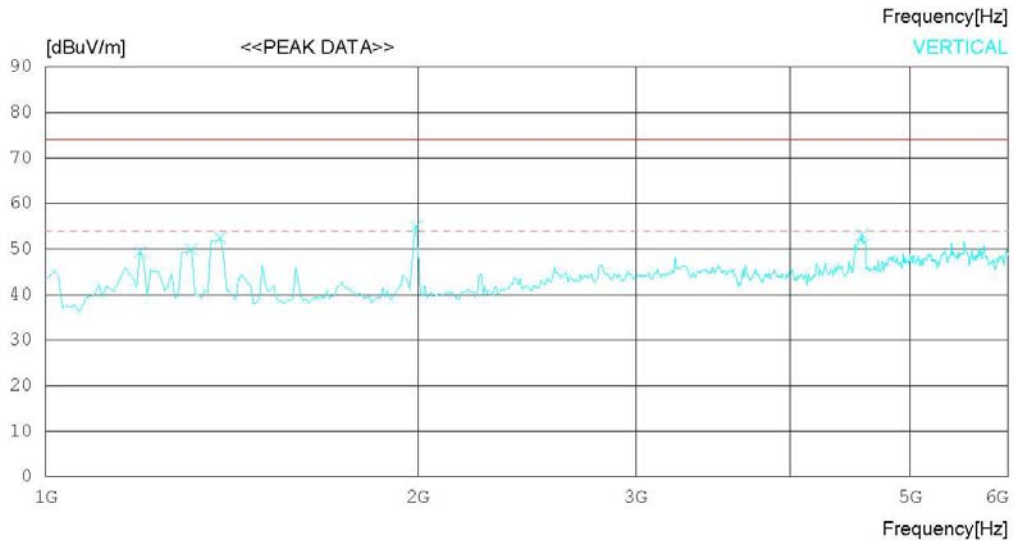
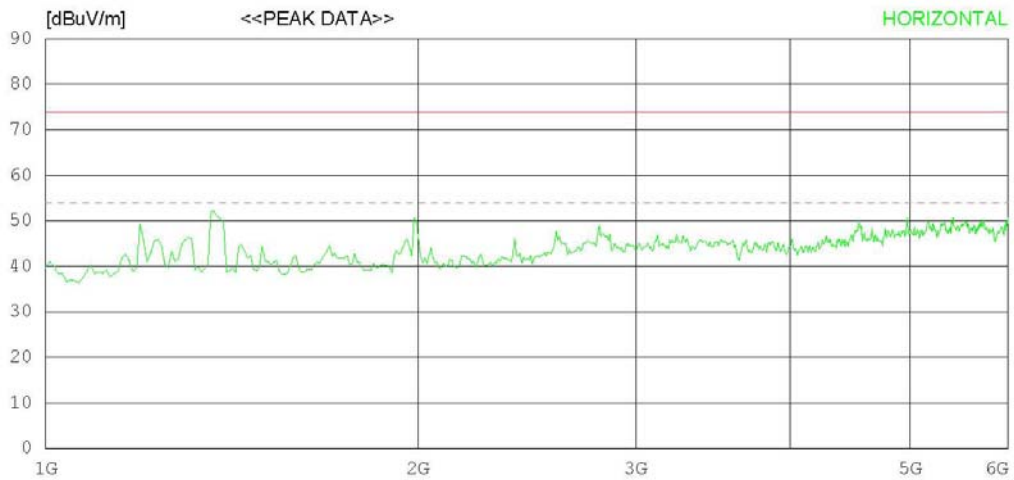
< USB MODE\_1 GHz ~ 6 GHz\_Peak >

## RADIATED EMISSION

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 35 % R.H
Test Condition	: USB	Operator	:
Memo	:		

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



## RADIATED EMISSION

Date : 2012-03-22

Model Name : 32LM3400-UC	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 21 °C 35 % R.H
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	1192.308	61.7	24.2	5.3	41.9	49.3	74.0	24.7	100	49
2	1312.500	61.6	24.6	5.5	41.8	49.9	74.0	24.1	100	172
3	1384.615	63.7	24.8	5.7	41.7	52.5	74.0	21.5	100	358
4	1993.589	64.4	25.2	7.0	41.7	54.9	74.0	19.1	100	358
5	4573.741	53.4	31.0	10.7	42.0	53.1	74.0	20.9	100	226

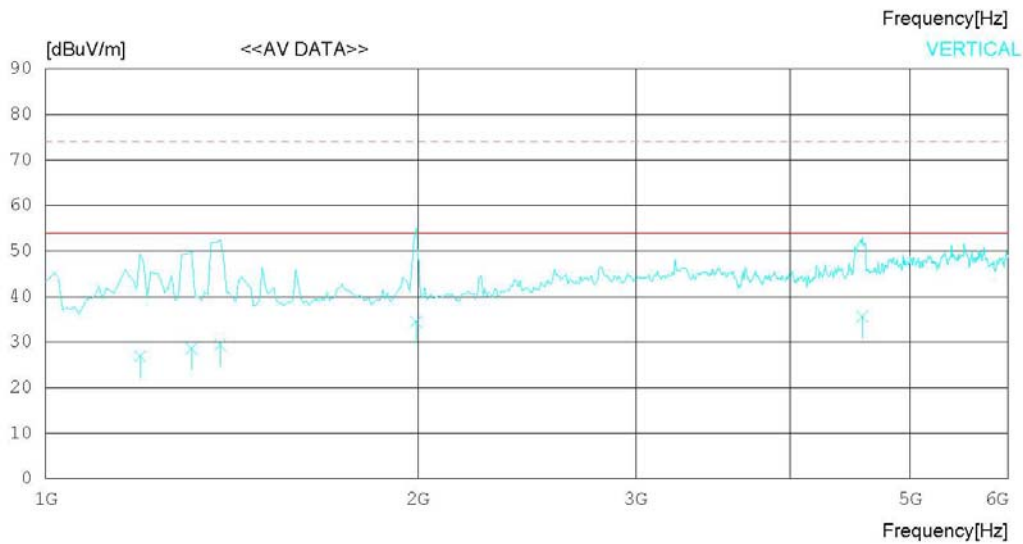
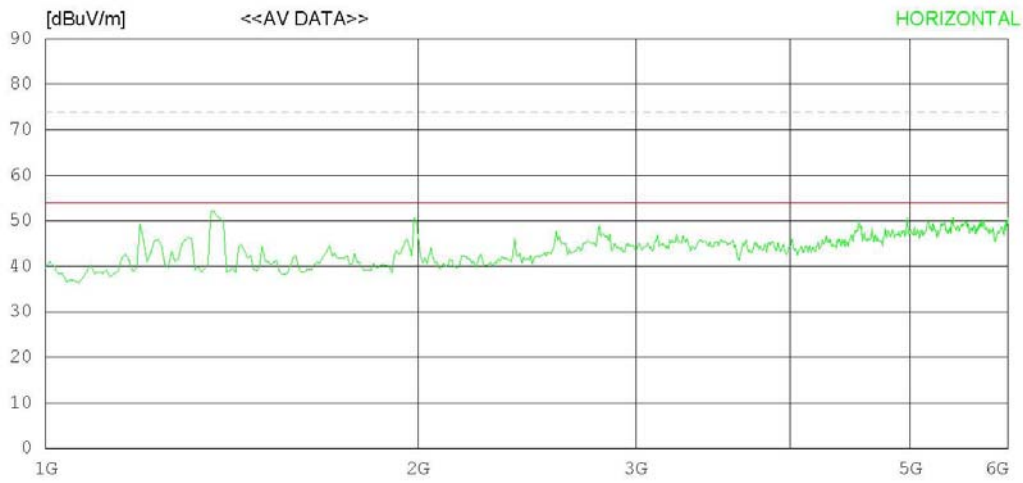
< USB MODE\_1 GHz ~ 6 GHz\_Average >

**RADIATED EMISSION**

Date : 2012-03-22

Model Name	: 32LM3400-UC	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 35 % R.H
Test Condition	: USB	Operator	:
Memo	:		

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



## RADIATED EMISSION

Date : 2012-03-22

Model Name : 32LM3400-UC	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 21 °C 35 % R.H
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	1192.308	39.3	24.2	5.3	41.9	26.9	54.0	27.1	100	49
2	1312.500	40.3	24.6	5.5	41.8	28.6	54.0	25.4	100	172
3	1384.615	40.6	24.8	5.7	41.7	29.4	54.0	24.6	100	358
4	1993.589	44.0	25.2	7.0	41.7	34.5	54.0	19.5	100	358
5	4573.741	35.9	31.0	10.7	42.0	35.6	54.0	18.4	100	226

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## Appendix 1

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### List of Test and Measurement Instruments

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment is identified by the Test Laboratory.

### 1. Conducted Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
<input type="checkbox"/> SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
<input type="checkbox"/> RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2011.07.02	2012.07.02
<input type="checkbox"/> LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
<input type="checkbox"/> LISN	KNW-242	KYORITSU	8-654-15	2011.09.19	2012.09.19
<input type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input checked="" type="checkbox"/> LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2011.09.30	2012.09.30
<input checked="" type="checkbox"/> LISN	LISN1600	TTI	197204	2011.07.02	2012.07.02
<input checked="" type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09

### 2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> BILOG ANTENNA	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
<input checked="" type="checkbox"/> HORN ANTENNA	3115	ETS	6419	2012.02.20	2013.02.20
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
<input checked="" type="checkbox"/> AMPLIFIER	MLA-00108-B02-36	TSJ	1518831	2012.01.09	2013.01.09
<input type="checkbox"/> SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2011.07.11	2012.07.11
<input type="checkbox"/> AMPLIFIER	8447D	AGILENT	2443A03690	2011.07.01	2012.07.01
<input type="checkbox"/> BILOG ANTENNA	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
<input type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2010.11.29	2012.11.29
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2010.07.07	2012.07.07
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2010.12.21	2012.12.21
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2010.11.29	2012.11.29
<input type="checkbox"/> AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2012.03.05	2013.03.05