

EMC TEST REPORT

Test item : LED LCD TV monitor
Model No. : 47LT560E-UA
Order No. : 1208-01494
Date of receipt : 2012-08-17
Test duration : 2012-08-23 ~ 2012-08-24
Use of report : FCC CoC Marking
Date of Issue : 2012-08-24

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 : (24 ~ 25) °C,
Humidity : (49 ~ 56) % 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.

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Tested by:

Reviewed by:


Assistant Manager
D.H.EUN


General Manager
C.H.LEE

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.digitalemcc.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.	47LT560E-UA
EUT Type	LED LCD TV monitor
Serial No	NONE
FCC ID	BEJ47LT560EUA
High Frequency	667 MHz
Rating	AC 100-240 V, ~ 50/60 Hz
Supplied Power for Test	AC 120 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

RGB(PC), HDMI (PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1360x768	47.712	60.015
1280x1024	63.981	60.020
1920x1080	67.5	60.00

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.)
Conducted Disturbance	08-24	25	49
Radiated Disturbance	08-23	24	56

4.3 Test result Summary

(1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.15079	N	62.5	Quasi-Peak	66.0	3.5

(2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
38.947	V	36.8	Quasi-Peak	40.0	3.2

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

- DSUB MODE – Resolution : 1920 X 1080 Resolution (Worst Case)
- HDMI MODE – Resolution : 1920 X 1080 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	VOSTRO220	G3RZKBX	DELL	POWER	1.8	Non-shield	Plastic	DOC
				HDMI	1.8	Shield		
				DSUB	1.8	Shield		
				USB	1.8	Shield		
				USB	1.8	Shield		
				USB	1.8	Shield		
KEYBOARD	SKG-2000UW	TAKZ12501OK	MONITEREY INTERNATIONAL CORP	USB	1.8	Shield	Plastic	DOC
MOUSE	1094	X817158-002	MICROSOFT CORPORATION	USB	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	USM4GP	11725AGGNN	SONY Corporation	USB	-	-	-	DOC
PRINTER	SRP-770	SRP77008060035	BICSOLON	POWER	1.8	Non-shield	Plastic	DOC
				USB	1.8			

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15 MHz to 30 MHz, 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 0.8 m above the reference ground plane and 0.4 m 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 0.15 m 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 2nd 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(μV)			
	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 0.15 MHz to 0.5 MHz.				

Note) 1. Emission Level = Reading Value + Correction Factor.

2. Correction Factor = Cable Loss + Insertion Loss of LISN

3. Margin = Limit - Emission level

Test Result

< DSUB MODE >



Results of Conducted Emission

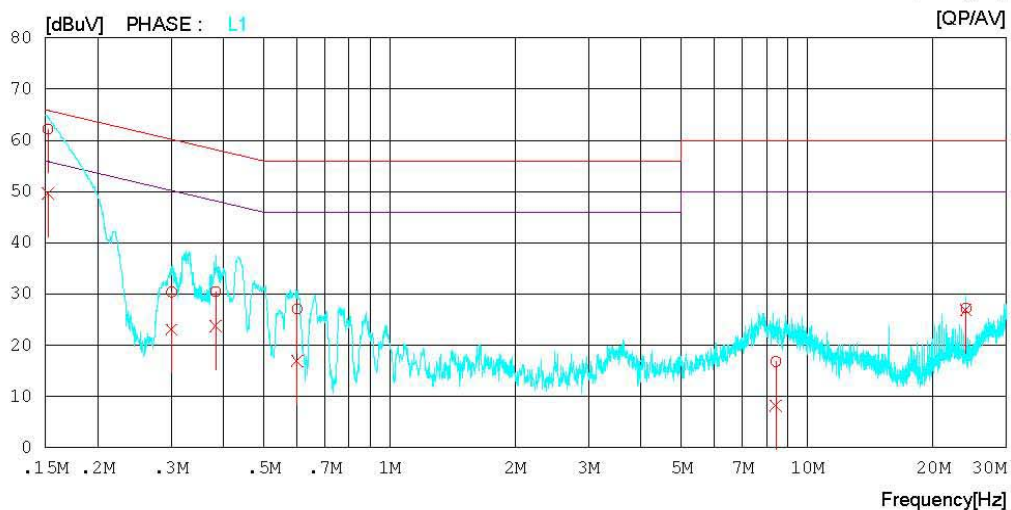
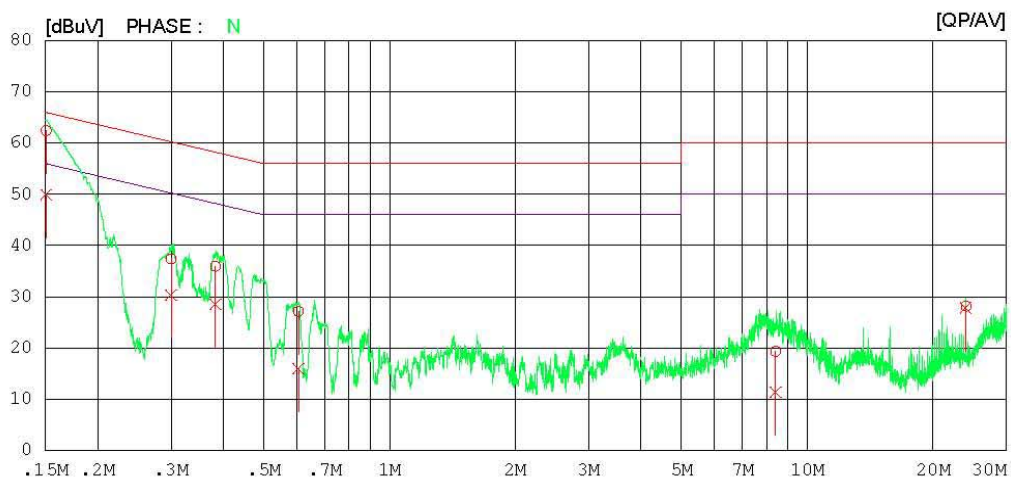
Digital EMC
Date : 2012-08-24

Model No. : 47LT560E-UA
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-08-24

Model No. : 47LT560E-UA
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % 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	0.15068	62.1	49.6	0.3	62.4	49.9	66.0	56.0	3.6	6.1	N
2	0.29996	37.2	30.1	0.2	37.4	30.3	60.2	50.2	22.8	19.9	N
3	0.38319	35.6	28.2	0.3	35.9	28.5	58.2	48.2	22.3	19.7	N
4	0.60544	26.9	15.7	0.2	27.1	15.9	56.0	46.0	28.9	30.1	N
5	8.40500	18.7	10.8	0.6	19.3	11.4	60.0	50.0	40.7	38.6	N
6	24.00050	26.9	26.5	1.3	28.2	27.8	60.0	50.0	31.8	22.2	N
7	0.15224	61.9	49.3	0.3	62.2	49.6	65.9	55.9	3.7	6.3	L1
8	0.30090	30.2	22.9	0.2	30.4	23.1	60.2	50.2	29.8	27.1	L1
9	0.38330	30.2	23.5	0.3	30.5	23.8	58.2	48.2	27.7	24.4	L1
10	0.60126	26.9	16.8	0.2	27.1	17.0	56.0	46.0	28.9	29.0	L1
11	8.41550	16.2	7.6	0.6	16.8	8.2	60.0	50.0	43.2	41.8	L1
12	24.00100	26.0	25.6	1.3	27.3	26.9	60.0	50.0	32.7	23.1	L1

< HDMI MODE >



Results of Conducted Emission

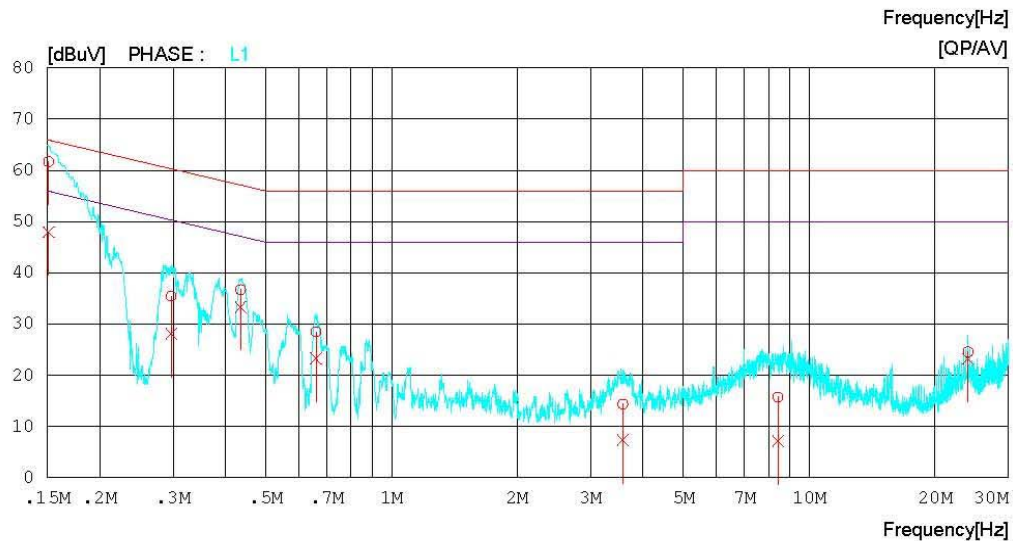
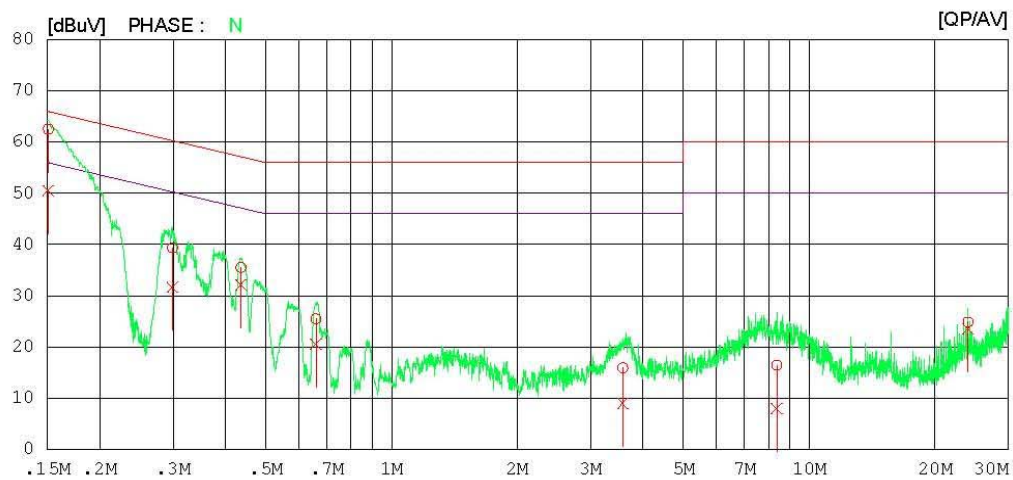
Digital EMC
Date : 2012-08-24

Model No. : 47LT560E-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-08-24

Model No. : 47LT560E-UA
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % 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	0.15079	62.2	50.2	0.3	62.5	50.5	66.0	56.0	3.5	5.5	N
2	0.29906	39.2	31.5	0.2	39.4	31.7	60.3	50.3	20.9	18.6	N
3	0.43614	35.3	31.9	0.2	35.5	32.1	57.1	47.1	21.6	15.0	N
4	0.65971	25.3	20.4	0.2	25.5	20.6	56.0	46.0	30.5	25.4	N
5	3.58200	15.5	8.6	0.4	15.9	9.0	56.0	46.0	40.1	37.0	N
6	8.36750	15.8	7.4	0.6	16.4	8.0	60.0	50.0	43.6	42.0	N
7	24.00000	23.6	22.2	1.3	24.9	23.5	60.0	50.0	35.1	26.5	N
8	0.15111	61.4	47.6	0.3	61.7	47.9	65.9	55.9	4.2	8.0	L1
9	0.29703	35.2	28.0	0.2	35.4	28.2	60.3	50.3	24.9	22.1	L1
10	0.43556	36.5	33.1	0.2	36.7	33.3	57.1	47.1	20.4	13.8	L1
11	0.65948	28.3	23.1	0.2	28.5	23.3	56.0	46.0	27.5	22.7	L1
12	3.57850	14.0	7.0	0.4	14.4	7.4	56.0	46.0	41.6	38.6	L1
13	8.42250	15.2	6.5	0.6	15.8	7.1	60.0	50.0	44.2	42.9	L1
14	24.00100	23.3	21.9	1.3	24.6	23.2	60.0	50.0	35.4	26.8	L1

< USB MODE >



Results of Conducted Emission

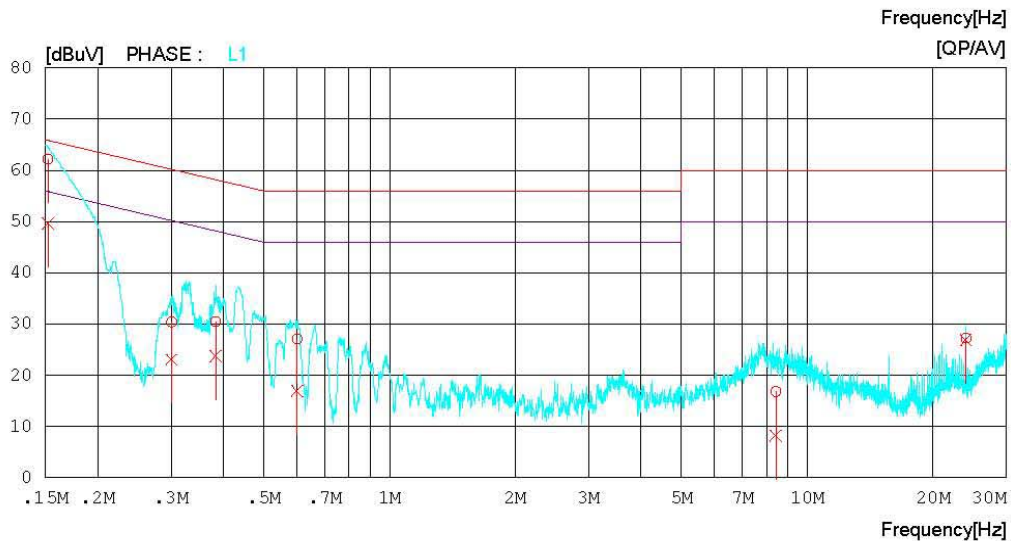
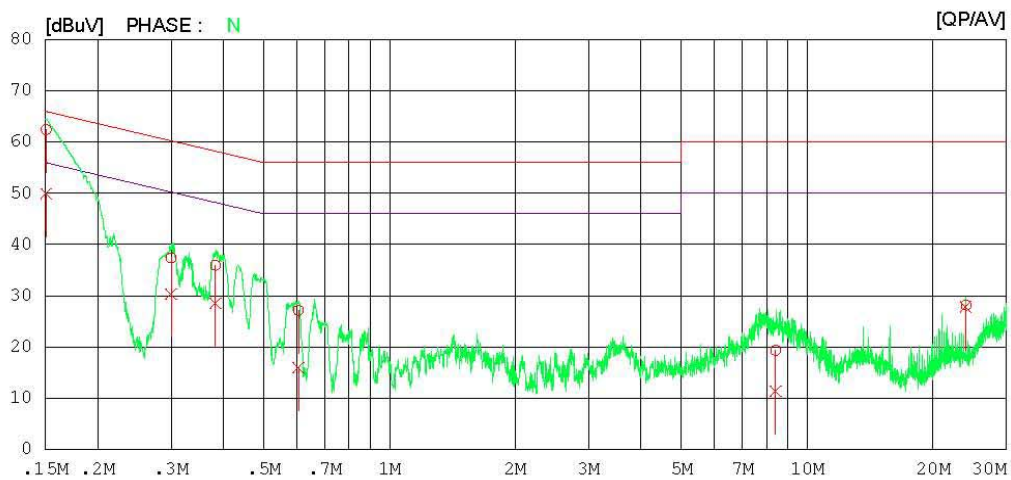
Digital EMC
Date : 2012-08-24

Model No. : 42LT560C-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2012-08-24

Model No. : 42LT560C-UA
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 25 °C 49 % 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	0.15068	62.1	49.6	0.3	62.4	49.9	66.0	56.0	3.6	6.1	N
2	0.29996	37.2	30.1	0.2	37.4	30.3	60.2	50.2	22.8	19.9	N
3	0.38319	35.6	28.2	0.3	35.9	28.5	58.2	48.2	22.3	19.7	N
4	0.60544	26.9	15.7	0.2	27.1	15.9	56.0	46.0	28.9	30.1	N
5	8.40500	18.7	10.8	0.6	19.3	11.4	60.0	50.0	40.7	38.6	N
6	24.00050	26.9	26.5	1.3	28.2	27.8	60.0	50.0	31.8	22.2	N
7	0.15224	61.9	49.3	0.3	62.2	49.6	65.9	55.9	3.7	6.3	L1
8	0.30090	30.2	22.9	0.2	30.4	23.1	60.2	50.2	29.8	27.1	L1
9	0.38330	30.2	23.5	0.3	30.5	23.8	58.2	48.2	27.7	24.4	L1
10	0.60126	26.9	16.8	0.2	27.1	17.0	56.0	46.0	28.9	29.0	L1
11	8.41550	16.2	7.6	0.6	16.8	8.2	60.0	50.0	43.2	41.8	L1
12	24.00100	26.0	25.6	1.3	27.3	26.9	60.0	50.0	32.7	23.1	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 0.8 m above the reference ground plane and 3 m or 10 m 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 0.15 m above the reference ground plane.

Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m 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 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.

Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz 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	1 000
108 – 500	2 000
500 – 1 000	5 000
Above 1 000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	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 (10 m distance)	Class B Equipment (10 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
30 to 230	40	30
230 to 1 000	47	37

(2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + Correction Factor.

2. Correction Factor = Cable loss - Amp gain + Antenna Factor

3. Margin = Limit - Emission level

Test Result

< DSUB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

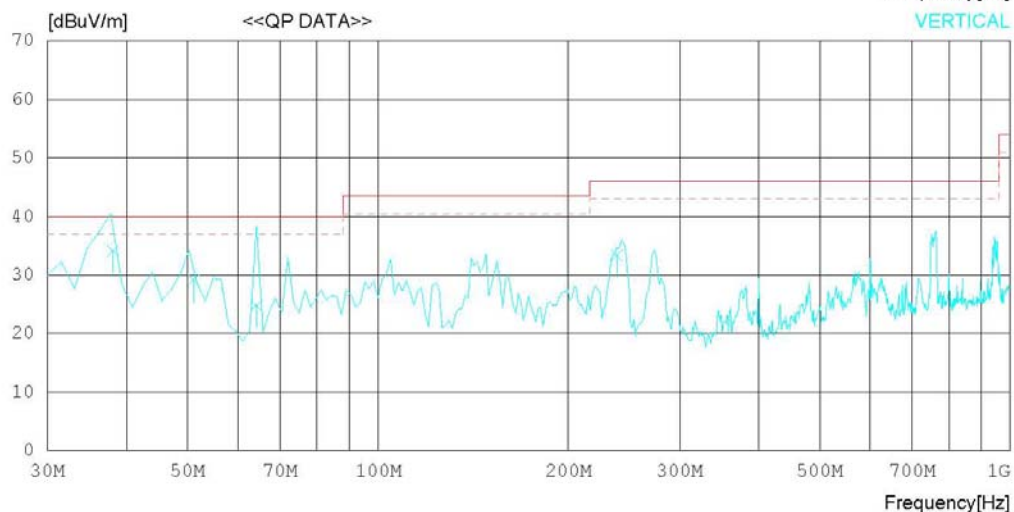
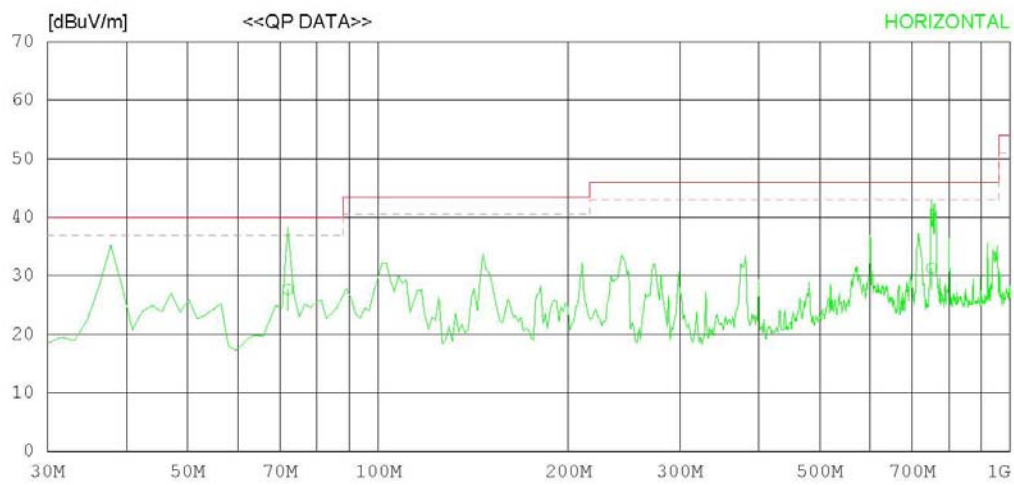
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 °C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % R.H
Test Condition : DSUB	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	72.009	42.7	6.5	1.2	22.7	27.7	40.0	12.3	200	151
2	750.408	31.3	19.6	4.4	24.0	31.3	46.0	14.7	100	25
----- Vertical -----										
3	38.081	41.2	15.0	0.9	23.0	34.1	40.0	5.9	100	32
4	51.081	41.9	9.0	1.0	22.8	29.1	40.0	10.9	100	255
5	64.199	40.4	5.9	1.2	22.7	24.8	40.0	15.2	100	358
6	238.466	42.3	12.3	2.3	23.5	33.4	46.0	12.6	200	203

< DSUB MODE _ (1 ~ 6) GHz_Peak >

RADIATED EMISSION

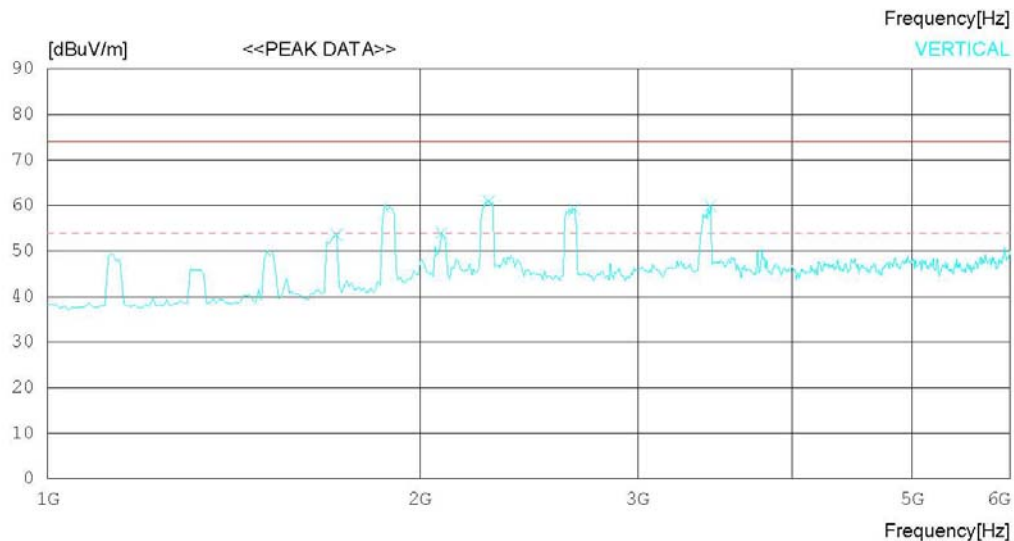
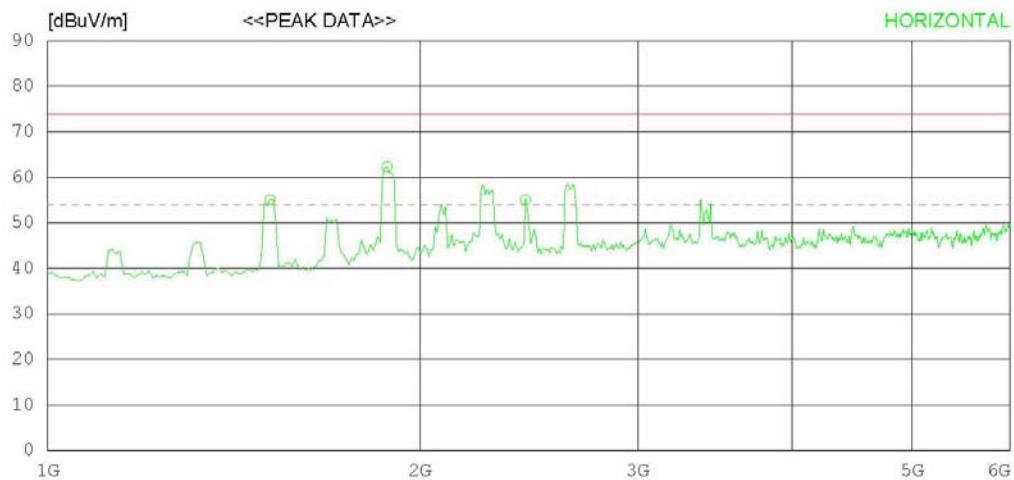
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % R.H
Test Condition : DSUB	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]
----- Horizontal -----										
1	1512.820	64.5	26.2	6.0	41.6	55.1	74.0	18.9	100	358
2	1881.410	69.7	27.5	6.8	41.7	62.3	74.0	11.7	100	191
3	2434.300	60.6	28.8	7.7	42.0	55.1	74.0	18.9	100	358
----- Vertical -----										
4	1713.141	62.0	26.9	6.4	41.7	53.6	74.0	20.4	100	1
5	2081.731	60.5	28.1	7.1	41.7	54.0	74.0	20	100	195
6	2274.042	66.8	28.5	7.4	41.8	60.9	74.0	13.1	100	226
7	2666.676	63.5	29.3	8.1	41.7	59.2	74.0	14.8	100	1
8	3435.918	61.5	31.0	9.4	42.0	59.9	74.0	14.1	100	1

< DSUB MODE _ (1 ~ 6) GHz_Average >

RADIATED EMISSION

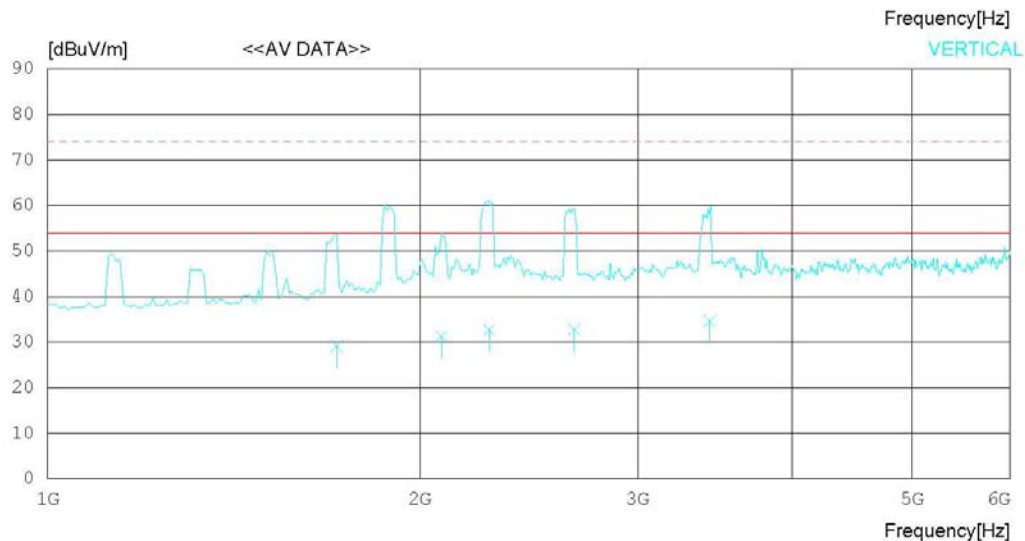
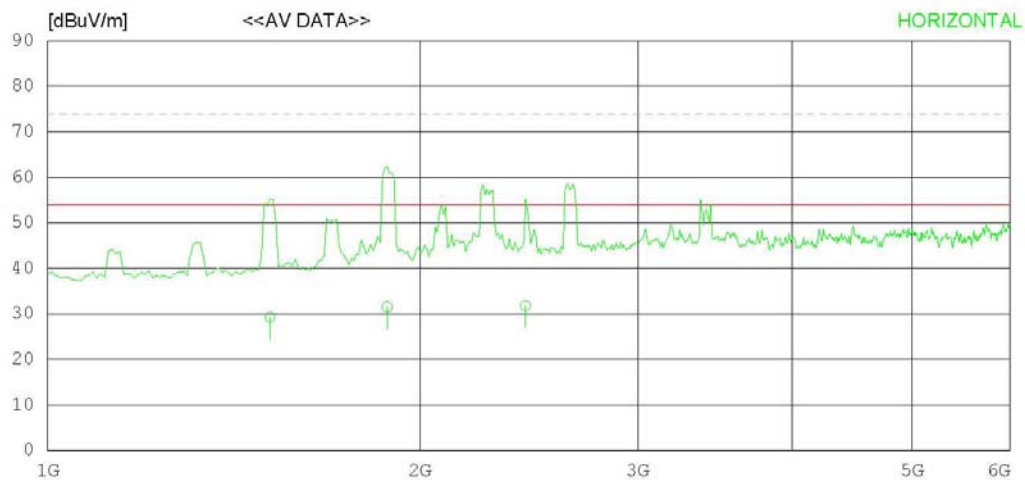
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % R.H
Test Condition : DSUB	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]
----- Horizontal -----										
1	1512.820	38.7	26.2	6.0	41.6	29.3	54.0	24.7	100	358
2	1881.410	38.9	27.5	6.8	41.7	31.5	54.0	22.5	100	191
3	2434.300	37.3	28.8	7.7	42.0	31.8	54.0	22.2	100	358
----- Vertical -----										
4	1713.141	37.5	26.9	6.4	41.7	29.1	54.0	24.9	100	1
5	2081.731	37.7	28.1	7.1	41.7	31.2	54.0	22.8	100	195
6	2274.042	38.6	28.5	7.4	41.8	32.7	54.0	21.3	100	226
7	2666.676	37.1	29.3	8.1	41.7	32.8	54.0	21.2	100	1
8	3429.971	36.4	31.0	9.3	42.0	34.7	54.0	19.3	100	1

< HDMI MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

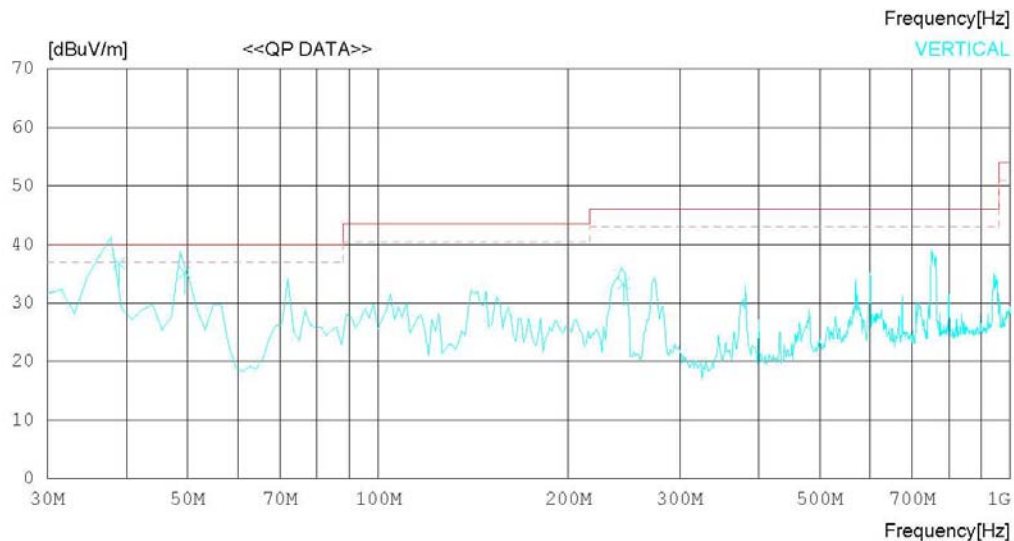
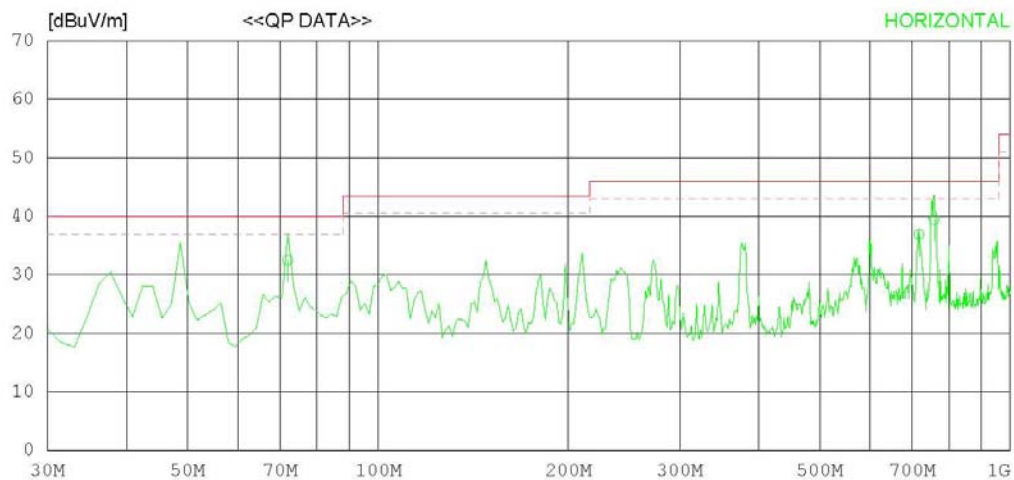
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % R.H
Test Condition : HDMI	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	71.985	47.5	6.5	1.2	22.7	32.5	40.0	7.5	400	274
2	717.084	37.6	19.1	4.3	24.1	36.9	46.0	9.1	100	212
3	757.501	39.4	19.7	4.4	24.0	39.5	46.0	6.5	100	0
----- Vertical -----										
4	38.947	44.4	14.5	0.9	23.0	36.8	40.0	3.2	100	284
5	49.514	47.3	9.8	1.0	22.8	35.3	40.0	4.7	100	1
6	244.520	41.9	12.7	2.3	23.6	33.3	46.0	12.7	200	186

< HDMI MODE _ (1 ~ 6) GHz _ Peak >

RADIATED EMISSION

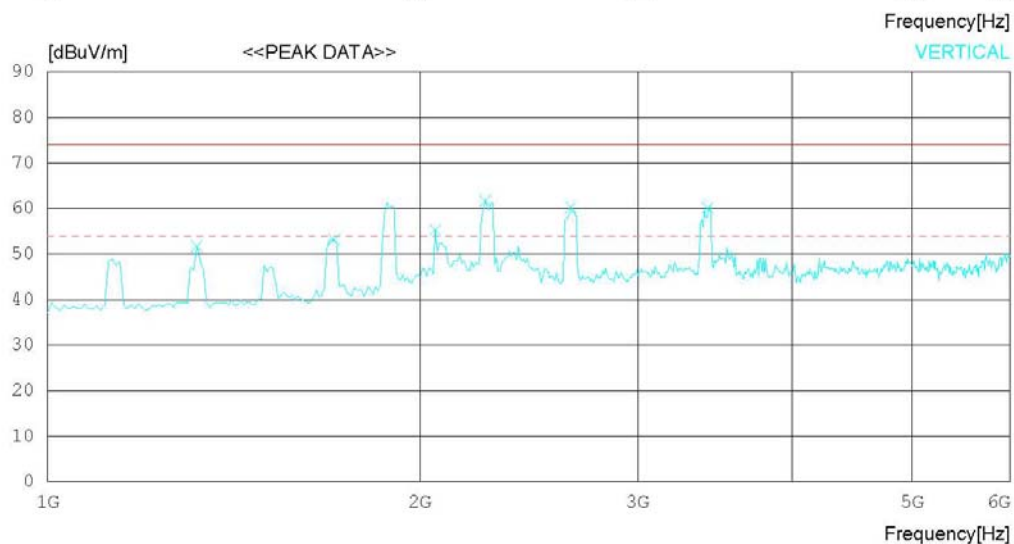
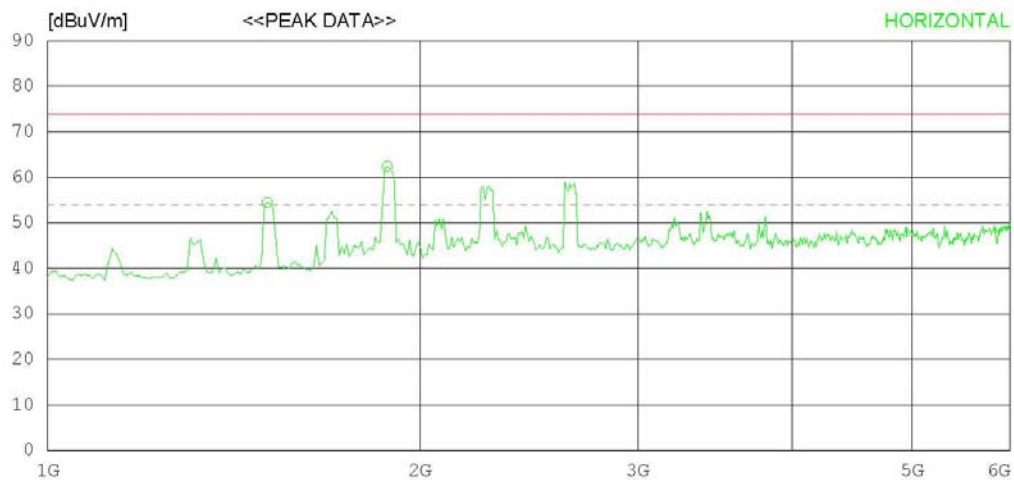
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % 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]
----- Horizontal -----										
1	1504.807	64.0	26.1	6.0	41.6	54.5	74.0	19.5	100	1
2	1881.410	69.8	27.5	6.8	41.7	62.4	74.0	11.6	100	1
----- Vertical -----										
3	1320.513	62.6	25.4	5.5	41.8	51.7	74.0	22.3	100	172
4	1705.128	61.6	26.9	6.4	41.7	53.2	74.0	20.8	100	358
5	2057.692	61.7	28.1	7.1	41.7	55.2	74.0	18.8	100	188
6	2258.016	67.5	28.5	7.4	41.7	61.7	74.0	12.3	100	213
7	2650.650	64.7	29.3	8.1	41.8	60.3	74.0	13.7	100	358
8	3419.892	61.9	31.0	9.3	42.0	60.2	74.0	13.8	100	217

< HDMI MODE _ (1 ~ 6) GHz _ Average >

RADIATED EMISSION

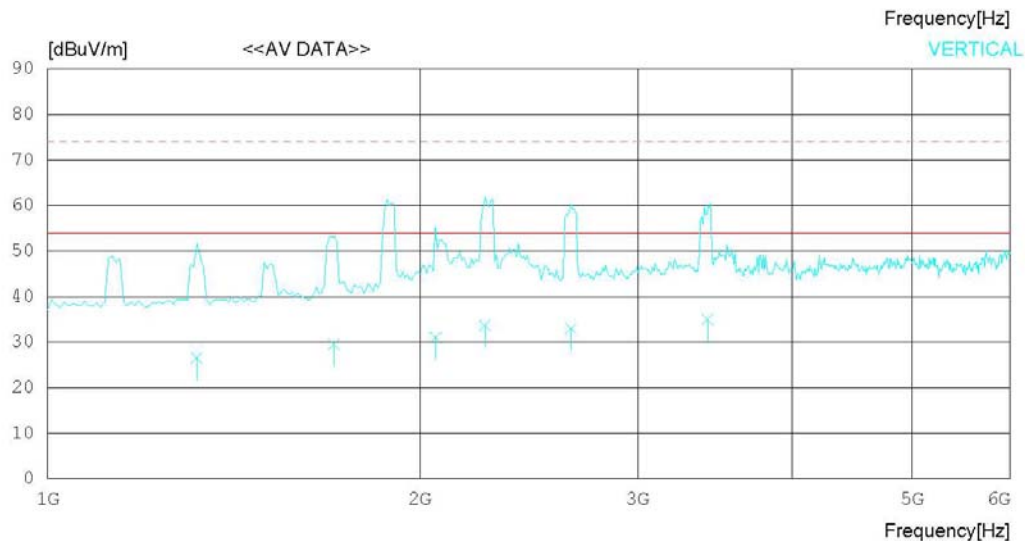
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % 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]
----- Horizontal -----										
1	1504.394	40.0	26.1	6.0	41.6	30.5	54.0	23.5	100	1
2	1881.000	40.3	27.5	6.8	41.7	32.9	54.0	21.1	100	1
----- Vertical -----										
3	1319.725	37.4	25.4	5.5	41.8	26.5	54.0	27.5	100	172
4	1704.495	37.9	26.9	6.4	41.7	29.5	54.0	24.5	100	358
5	2059.365	37.5	28.1	7.1	41.7	31.0	54.0	23.0	100	188
6	2257.951	39.5	28.5	7.4	41.7	33.7	54.0	20.3	100	213
7	2649.961	37.4	29.3	8.1	41.8	33.0	54.0	21.0	100	358
8	3418.423	36.7	31.0	9.3	42.0	35.0	54.0	19.0	100	217

< USB MODE_30 MHz ~ 1 GHz >

RADIATED EMISSION

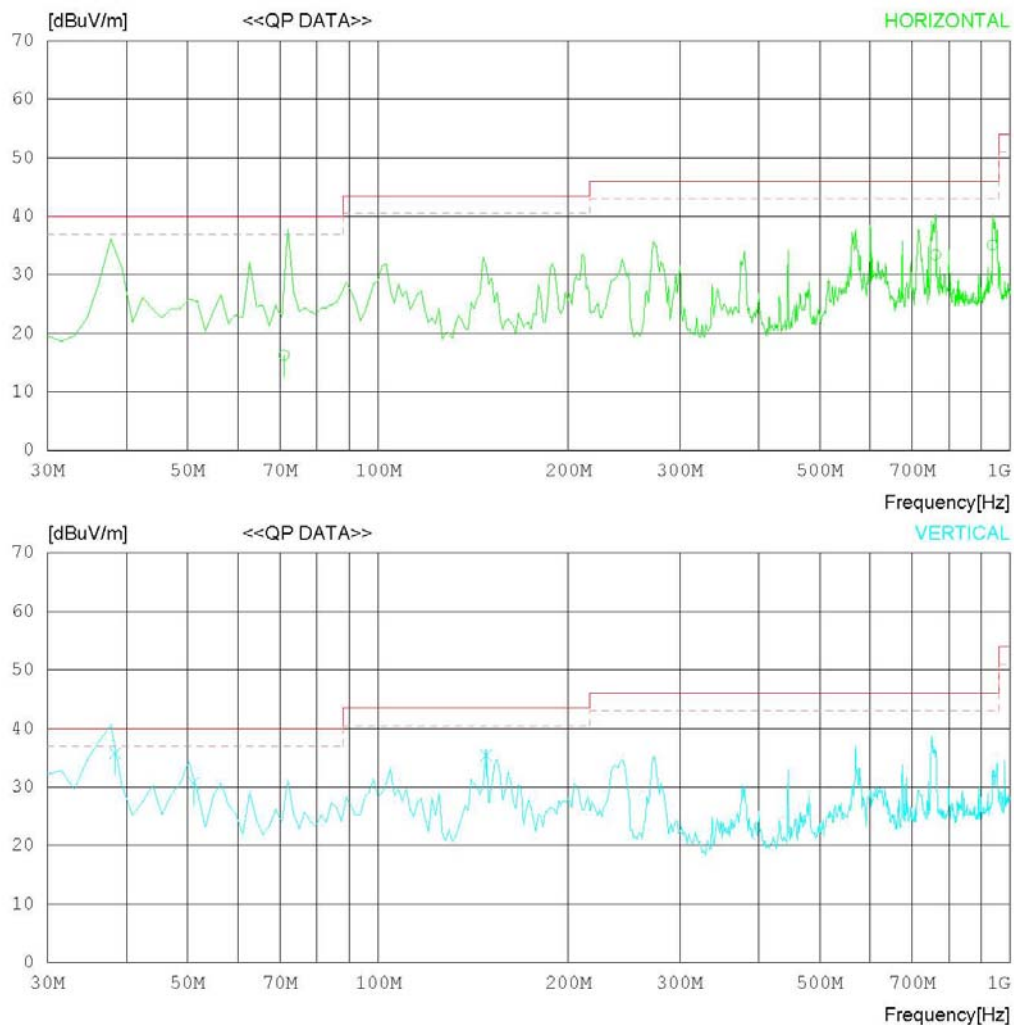
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % 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	71.000	31.4	6.4	1.2	22.7	16.3	40.0	23.7	200	358
2	762.164	33.3	19.7	4.4	24.0	33.4	46.0	12.6	100	148
3	936.783	32.2	20.9	4.9	22.9	35.1	46.0	10.9	100	0
----- Vertical -----										
4	38.370	43.1	14.8	0.9	23.0	35.8	40.0	4.2	100	358
5	51.033	43.5	9.0	1.0	22.8	30.7	40.0	9.3	100	329
6	148.360	46.3	10.5	1.7	23.1	35.4	43.5	8.1	100	32

< USB MODE _ (1 ~ 6) GHz _ Peak >

RADIATED EMISSION

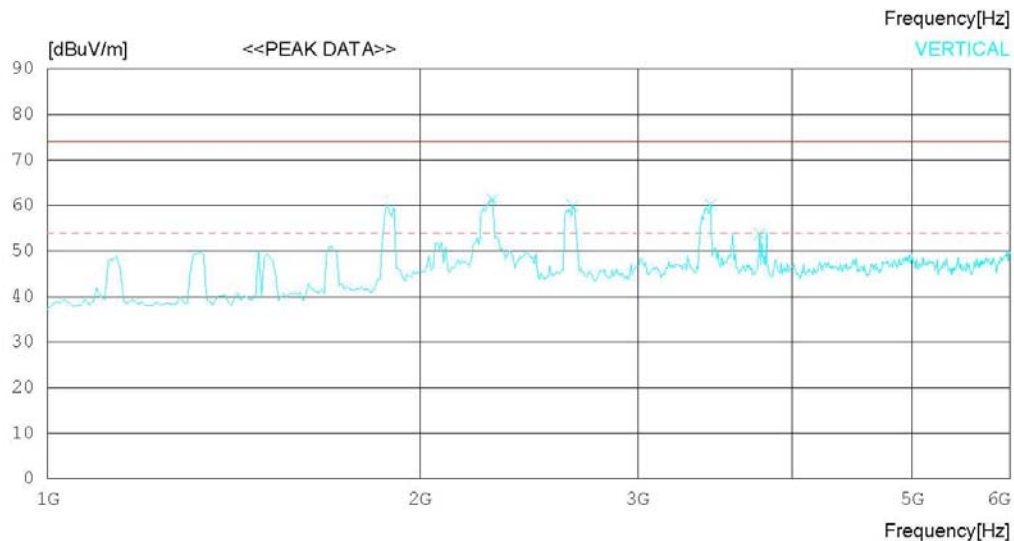
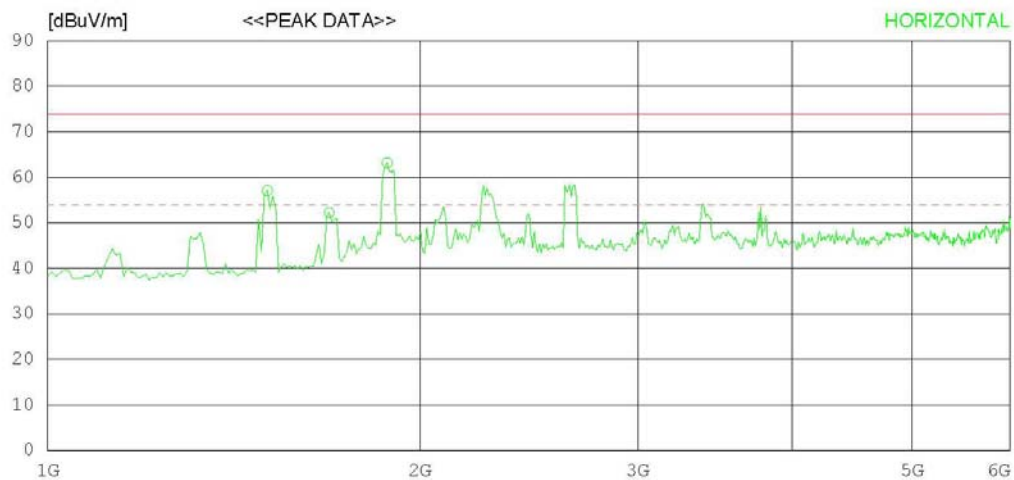
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 °C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name : 47LT560E-UA	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 24 °C 56 % 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]
----- Horizontal -----										
1	1504.807	66.6	26.1	6.0	41.6	57.1	74.0	16.9	100	358
2	1689.102	60.7	26.8	6.4	41.7	52.2	74.0	21.8	100	358
3	1881.410	70.6	27.5	6.8	41.7	63.2	74.0	10.8	100	178
----- Vertical -----										
4	2290.067	67.1	28.5	7.4	41.8	61.2	74.0	12.8	100	210
5	2658.663	64.2	29.3	8.1	41.7	59.9	74.0	14.1	100	1
6	3435.918	61.8	31.0	9.4	42.0	60.2	74.0	13.8	100	199
7	3764.448	54.1	31.8	9.7	41.8	53.8	74.0	20.2	100	111

< USB MODE _ (1 ~ 6) GHz _ Average >

RADIATED EMISSION

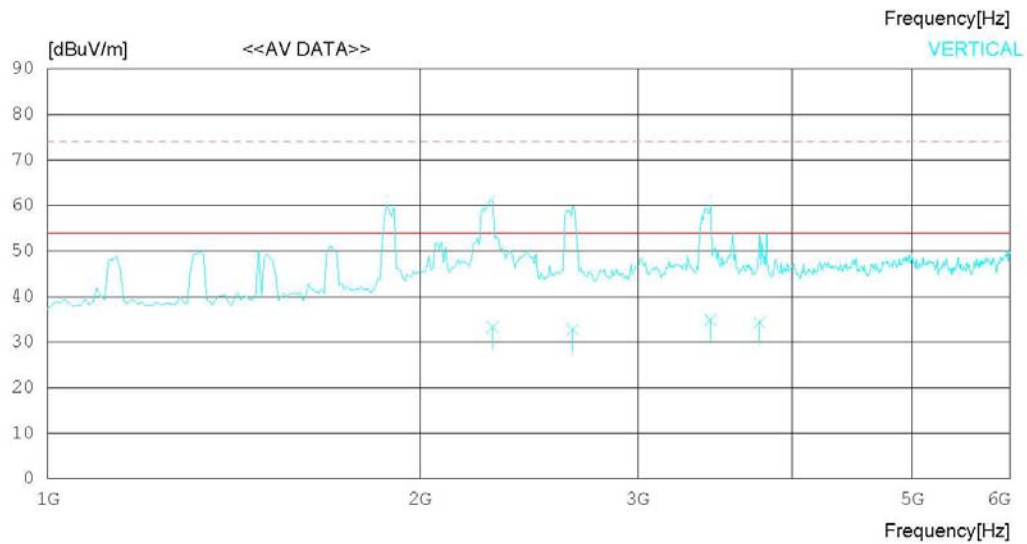
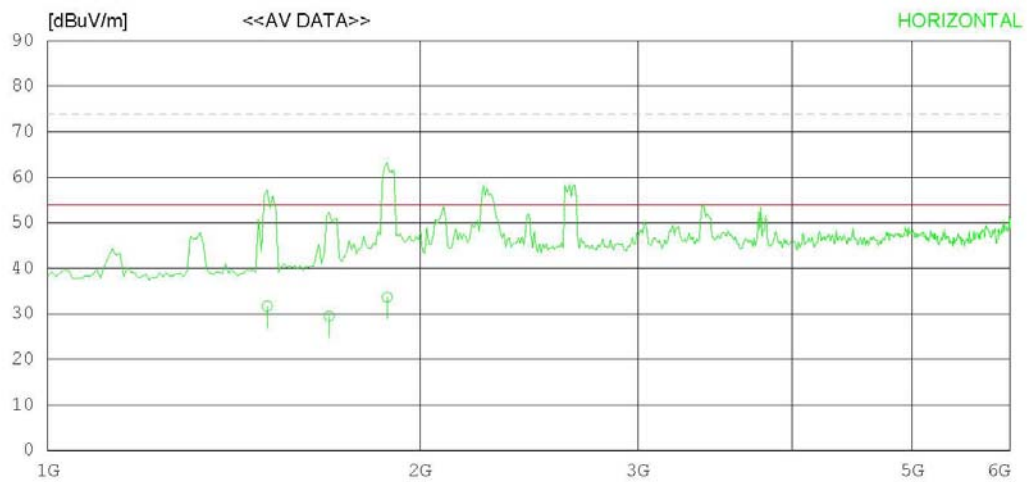
Date : 2012-08-23

Model Name : 47LT560E-UA
Model No. :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 24 'C 56 % R.H
Operator :

Memo :

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



RADIATED EMISSION

Date : 2012-08-23

Model Name	: 47LT560E-UA	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 24 °C 56 % 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]
----- Horizontal -----										
1	1504.807	41.2	26.1	6.0	41.6	31.7	54.0	22.3	100	358
2	1689.102	38.0	26.8	6.4	41.7	29.5	54.0	24.5	100	358
3	1881.410	41.0	27.5	6.8	41.7	33.6	54.0	20.4	100	178
----- Vertical -----										
4	2289.831	39.2	28.5	7.4	41.8	33.3	54.0	20.7	100	210
5	2658.634	37.1	29.3	8.1	41.7	32.8	54.0	21.2	100	1
6	3434.347	36.5	31.0	9.4	42.0	34.9	54.0	19.1	100	199
7	3764.000	34.6	31.8	9.7	41.8	34.3	54.0	19.7	100	111

Appendix 1

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
☐ SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
☐ RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
☐ LISN	KNW-407	KYORITSU	8-317-8	2012.01.09	2013.01.09
☐ LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.03.13	2013.03.13
☐ 50 OHM TERMINATOR	CT-01	TME	N/A	2012.01.09	2013.01.09
☒ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☒ LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2011.09.30	2012.09.30
☒ LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
☒ 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
☒ EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2012.01.09	2013.01.09
☒ BILOG ANTENNA	CBL6112D	SCHAFFNER	22609	2010.12.21	2012.12.21
☒ HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
☒ AMPLIFIER	8447E	H/P	2945A02865	2012.01.09	2013.01.09
☒ AMPLIFIER	MLA-00108-B02-36	TSJ	1518831	2012.01.09	2013.01.09
☐ SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
☐ AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
☐ BILOG ANTENNA	VULB9160	SCHAFFNER	3151	2010.08.25	2012.08.25
☐ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
☐ LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
☐ LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
☐ AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2012.03.05	2013.03.05