

EMC TEST REPORT

Test item : LED Monitor
Model No. : HSTND-3971-G, LD4745tm
Order No. : DEMC1402-00663
Date of receipt : 2014-02-21
Test duration : 2014-02-26 ~ 2014-02-27
Use of report : FCC CoC Marking
Date of Issue : 2014-03-04

Applicant : LG Electronics Inc.
222, LG-ro, Jinwi-myeon, Pyeongteak-si, Gyeonggi-do 451-713, REPUBLIC OF KOREA

Test laboratory : Digital EMC Co., Ltd.
42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 449-935

Test specification : CAN/CSA-CISPR 22-10
ANSI C 63.4:2009
ICES-003:2012
FCC Part 15 Subpart B
(Type of Device : Class B Personal Computers
and Peripherals (JBP))

Test environment : Temperature : 21 °C,
Humidity : (36 ~ 39) % 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
KyungMin Jeong

Reviewed by:



Manager
MyungJin Song

PRESIDENT OF DIGITAL EMC CO., LTD.

CONTENTS

1. General Remarks	3
2. Test Laboratory	3
3. General Information of EUT	4
4. Test Summary	5
4.1 Applied standards and test results	5
4.2 Test environment and conditions	5
4.3 Test result Summary	5
5. Test Set-up and operation mode	6
5.1 Principle of Configuration Selection	6
5.2 Test Operation Mode	6
5.3 Support Equipment Used	6
6. Test Results : Emission	7
6.1 Conducted Disturbance	7
6.2 Radiated Disturbance	18
Appendix 1	50
List of Test and Measurement Instruments	50
Appendix 2	52
Report Revision History	52

1. General Remarks

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address : 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 449-935

<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 596748	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385, R-4076, T-1442, G-338, G754	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	CARAT 13 11 86721 001	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.	HSTND-3971-G (HP Model No.), LD4745tm (LG Model No.)
EUT Type	LED Monitor
Serial No	KRG4050027
FCC ID	BEJHSTND-3971-G
Type of Sample Tested	Pre-Production
High Frequency	800 MHz
Rating	AC 100-240 V~ 50/60 Hz 1.3 A
Supplied Power for Test	AC 120 V, 60 Hz
Applicant	LG Electronics Inc. 222, LG-ro, Jinwi-myeon, Pyeongteak-si, Gyeonggi-do 451-713, REPUBLIC OF KOREA
Manufacturer	LG Electronics Inc. 222, LG-ro, Jinwi-myeon, Pyeongteak-si, Gyeonggi-do 451-713, REPUBLIC OF KOREA

4. Test Summary

4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2009 CAN/CSA-CISPR 22-10	C
Radiated Disturbance	ANSI C63.4:2009 CAN/CSA-CISPR 22-10	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 (YYYY-MM-DD)	Temp (°C)	Humidity (% R.H.)
Conducted Disturbance	2014-02-26	21	39
Radiated Disturbance	2014-02-27	21	36

4.3 Test result Summary

(1) Conducted Emission (DISPLAY MODE)

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.15000	L1	59.9	Quasi-Peak	66.0	6.1

(2) Radiated Emission (DISPLAY MODE)

Frequency [MHz]	Pol.	Result [dB(μ V/m)]	Detector	Limit [dB(μ V/m)]	Margin [dB]
30.000	V	27.7	Quasi-Peak	40.0	12.3

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

- DISPLAY, DSUB, HDMI, VOE MODE

: EUT displayed 'H' pattern on LCD display, 1920 x 1080 Resolution (Worst Case)

- USB MODE : EUT displayed pictures which is in USB.

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
Workstation	Z400	2UA0330R2T	HP	POWER	1.8	Not use	Non-shield	Plastic	DOC
				HDMI	1.6	Not use	Shield	Metal	
				DSUB	2.0	Not use	Shield	Metal	
				DP	1.8	Not use	Shield	Metal	
				USB	2.0	Not use	Shield	Metal	
				USB	1.8	Not use	Shield	Metal	
				USB	1.6	Not use	Shield	Metal	
				USB	1.6	Not use	Shield	Metal	
				LAN	1.6	Not use	Non-shield	Plastic	
LCD Monitor	U2312HMT	CN-036N7K-74445-199-440L	DELL	POWER	1.8	Not use	Non-shield	Plastic	DOC
				DSUB	2.0	Not use	Shield	Metal	
				DP	1.8	Not use	Shield	Metal	
MOUSE	APOLL0-LU	N/A	HP	USB	1.6	Not use	Shield	Metal	DOC
KEYBOARD	KB113t	CN-0D30KG-71616-243-0BU7-A00	DELL	USB	1.8	Not use	Shield	Metal	DOC
IR	N/A	N/A	N/A	IR	1.5	Not use	Non-shield	-	DOC
PRINTER	EPSON AcuLaser M1200	LWTZ181070	EPSON	USB	1.6	Not use	Shield	Metal	DOC
				POWER	1.8	Not use	Non-shield	Plastic	
Remote Control	AKB72915277	N/A	N/A	-	-	-	-	-	DOC
Head set 1	COV903	N/A	COSY	STEREO	2.0	Not use	Shield	Metal	DOC
Head set 2	COV903	N/A	COSY	STEREO	2.0	Not use	Shield	Metal	DOC
USB Memory	K-5	N/A	PLEOMAX	USB	-	-	-	-	-

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 and CAN/CSA-CISPR 22-10**.

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

< DISPLAY MODE >



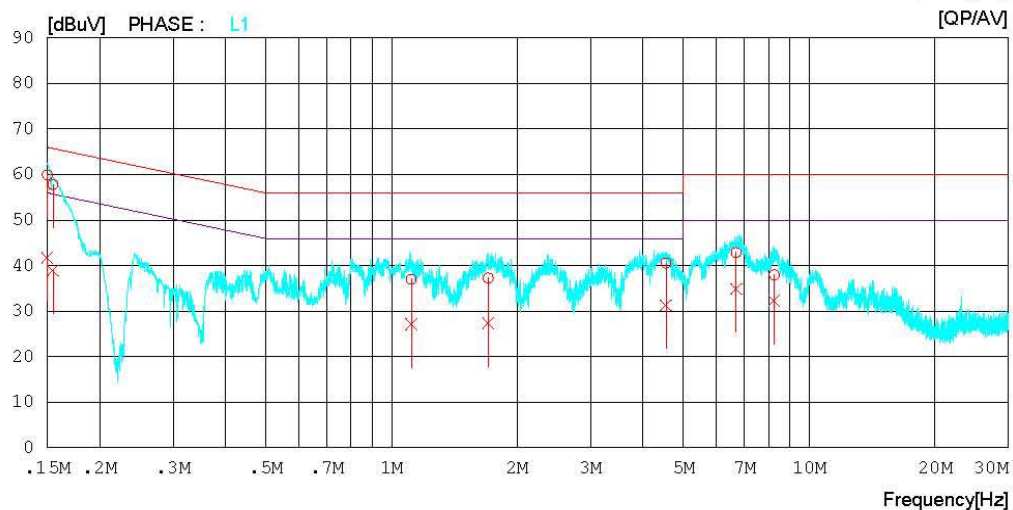
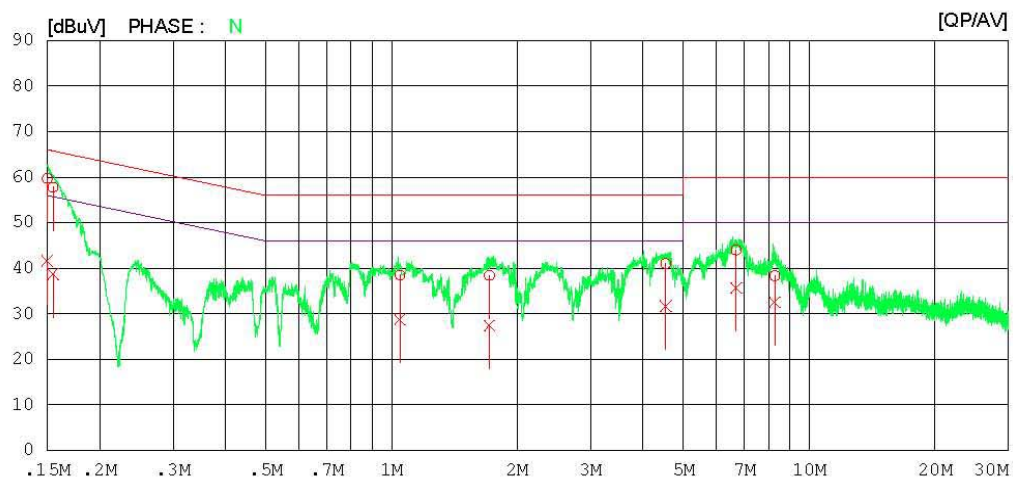
Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No.	: HSTND-3971-G, LD4745tm	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 21 °C 39 % R.H.
Test Condition	: DP	Operator	:

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : DP
Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % 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	0.15000	59.6	41.5	0.1	59.7	41.6	66.0	56.0	6.3	14.4	N
2	0.15468	57.7	38.6	0.1	57.8	38.7	65.7	55.7	7.9	17.0	N
3	1.04820	38.3	28.5	0.2	38.5	28.7	56.0	46.0	17.5	17.3	N
4	1.71580	38.1	27.1	0.3	38.4	27.4	56.0	46.0	17.6	18.6	N
5	4.53820	40.6	31.3	0.4	41.0	31.7	56.0	46.0	15.0	14.3	N
6	6.68480	43.5	35.2	0.5	44.0	35.7	60.0	50.0	16.0	14.3	N
7	8.27240	37.9	32.1	0.4	38.3	32.5	60.0	50.0	21.7	17.5	N
8	0.15000	59.8	41.7	0.1	59.9	41.8	66.0	56.0	6.1	14.2	L1
9	0.15473	57.7	38.8	0.1	57.8	38.9	65.7	55.7	7.9	16.8	L1
10	1.11560	36.8	26.9	0.2	37.0	27.1	56.0	46.0	19.0	18.9	L1
11	1.70540	37.0	27.0	0.3	37.3	27.3	56.0	46.0	18.7	18.7	L1
12	4.54020	40.1	30.9	0.4	40.5	31.3	56.0	46.0	15.5	14.7	L1
13	6.68400	42.4	34.4	0.5	42.9	34.9	60.0	50.0	17.1	15.1	L1
14	8.24760	37.6	31.9	0.4	38.0	32.3	60.0	50.0	22.0	17.7	L1

< DSUB MODE >



Results of Conducted Emission

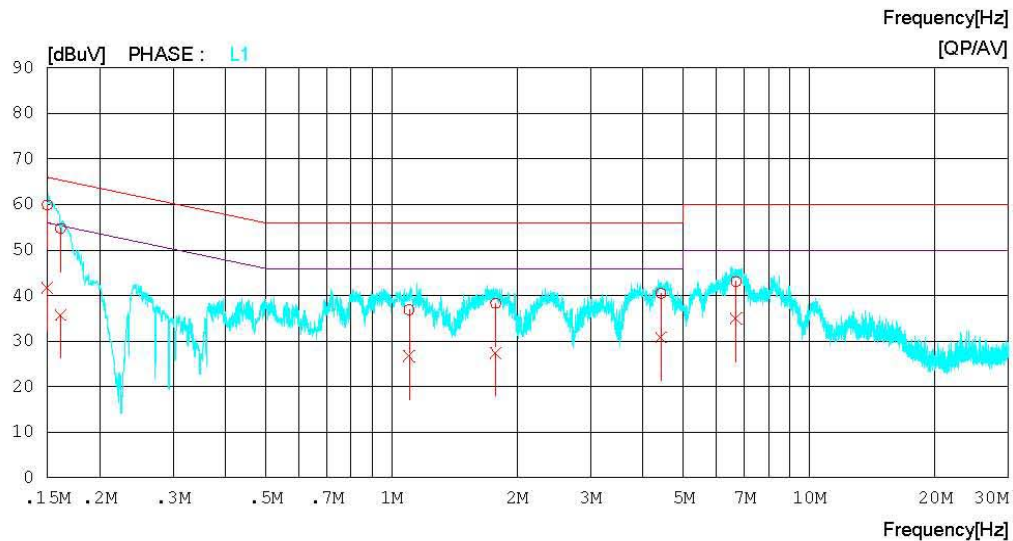
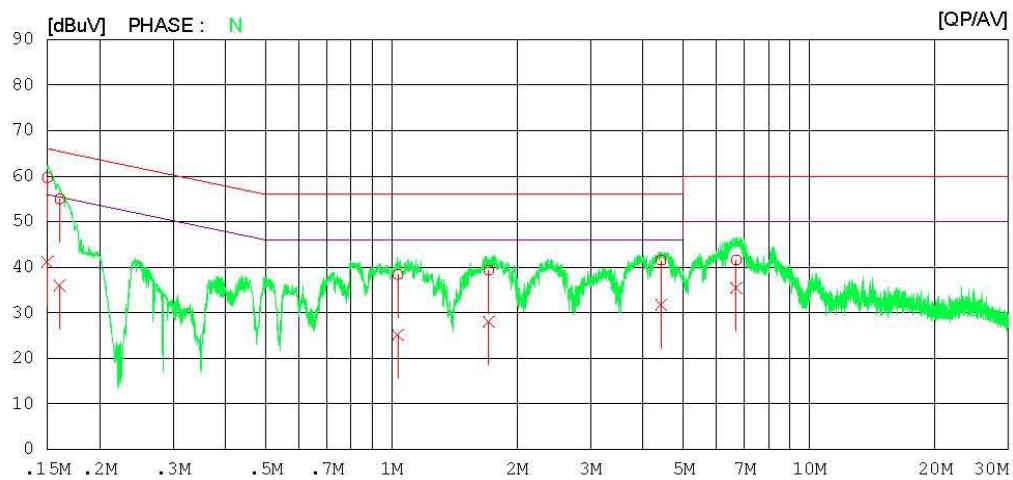
Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : DSUB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : DSUB
Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % 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	0.15013	59.6	41.1	0.1	59.7	41.2	66.0	56.0	6.3	14.8	N
2	0.16068	54.9	35.9	0.1	55.0	36.0	65.4	55.4	10.4	19.4	N
3	1.03700	38.2	24.9	0.2	38.4	25.1	56.0	46.0	17.6	20.9	N
4	1.71060	39.0	27.7	0.3	39.3	28.0	56.0	46.0	16.7	18.0	N
5	4.41820	41.1	31.4	0.4	41.5	31.8	56.0	46.0	14.5	14.2	N
6	6.69000	41.1	34.9	0.5	41.6	35.4	60.0	50.0	18.4	14.6	N
7	0.15000	59.8	41.6	0.1	59.9	41.7	66.0	56.0	6.1	14.3	L1
8	0.16143	54.7	35.6	0.1	54.8	35.7	65.4	55.4	10.6	19.7	L1
9	1.10180	36.7	26.5	0.2	36.9	26.7	56.0	46.0	19.1	19.3	L1
10	1.77620	38.0	27.1	0.3	38.3	27.4	56.0	46.0	17.7	18.6	L1
11	4.41900	40.1	30.5	0.4	40.5	30.9	56.0	46.0	15.5	15.1	L1
12	6.68680	42.6	34.5	0.5	43.1	35.0	60.0	50.0	16.9	15.0	L1

< HDMI MODE >



Results of Conducted Emission

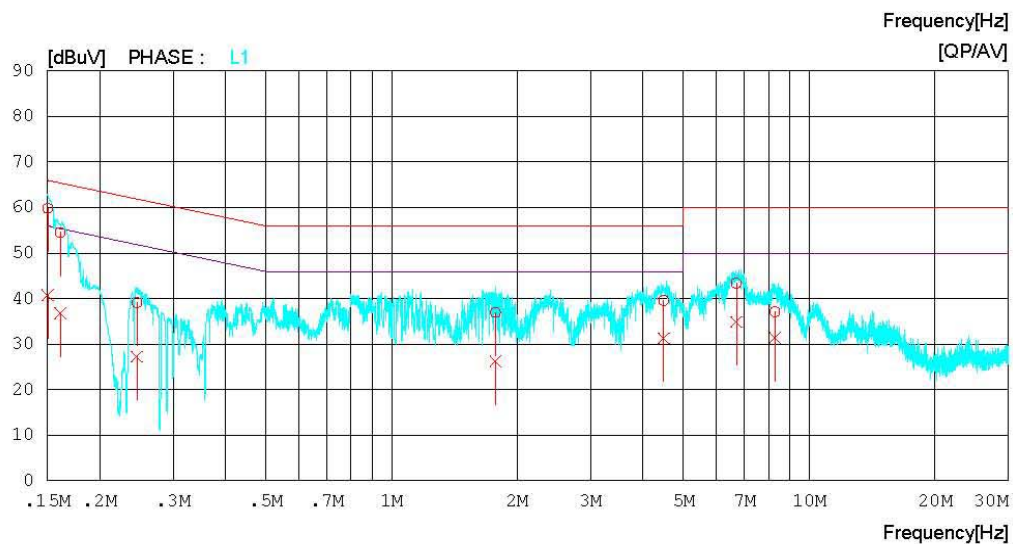
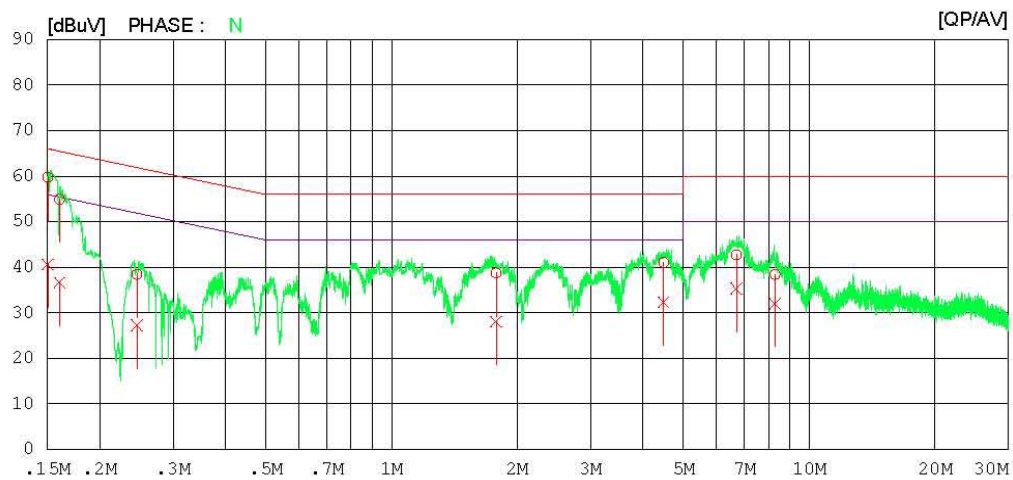
Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : HDMI

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : HDMI
Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % 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	0.15040	59.6	40.5	0.1	59.7	40.6	66.0	56.0	6.3	15.4	N
2	0.16050	54.8	36.5	0.1	54.9	36.6	65.4	55.4	10.5	18.8	N
3	0.24585	38.3	27.1	0.1	38.4	27.2	61.9	51.9	23.5	24.7	N
4	1.78040	38.4	27.8	0.3	38.7	28.1	56.0	46.0	17.3	17.9	N
5	4.48260	40.6	31.9	0.4	41.0	32.3	56.0	46.0	15.0	13.7	N
6	6.69340	42.2	34.8	0.5	42.7	35.3	60.0	50.0	17.3	14.7	N
7	8.28560	38.0	31.6	0.4	38.4	32.0	60.0	50.0	21.6	18.0	N
8	0.15040	59.7	40.7	0.1	59.8	40.8	66.0	56.0	6.2	15.2	L1
9	0.16108	54.4	36.7	0.1	54.5	36.8	65.4	55.4	10.9	18.6	L1
10	0.24573	39.0	27.1	0.1	39.1	27.2	61.9	51.9	22.8	24.7	L1
11	1.77400	36.6	26.0	0.3	36.9	26.3	56.0	46.0	19.1	19.7	L1
12	4.48460	39.2	30.9	0.4	39.6	31.3	56.0	46.0	16.4	14.7	L1
13	6.69300	42.9	34.4	0.5	43.4	34.9	60.0	50.0	16.6	15.1	L1
14	8.27720	36.7	31.0	0.4	37.1	31.4	60.0	50.0	22.9	18.6	L1

< USB MODE >



Results of Conducted Emission

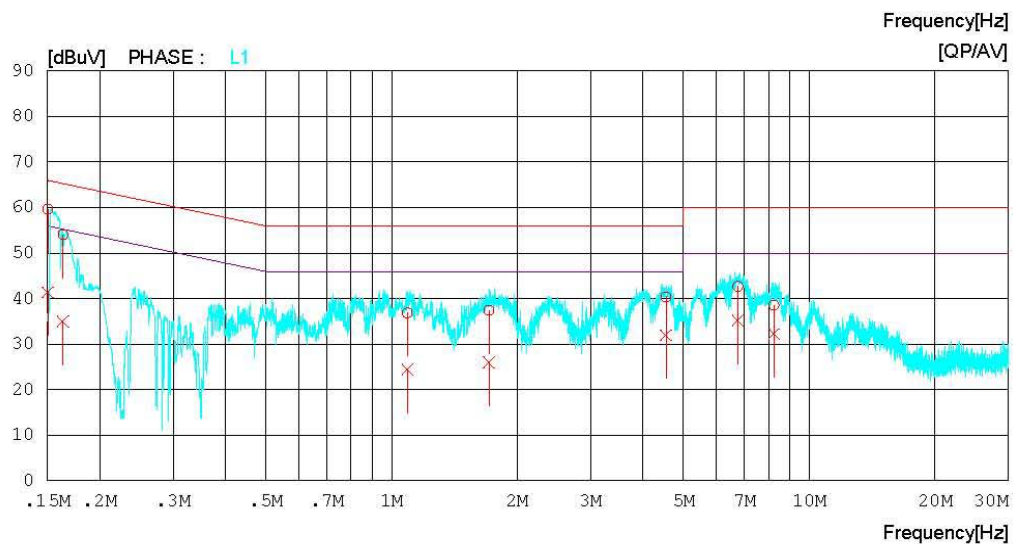
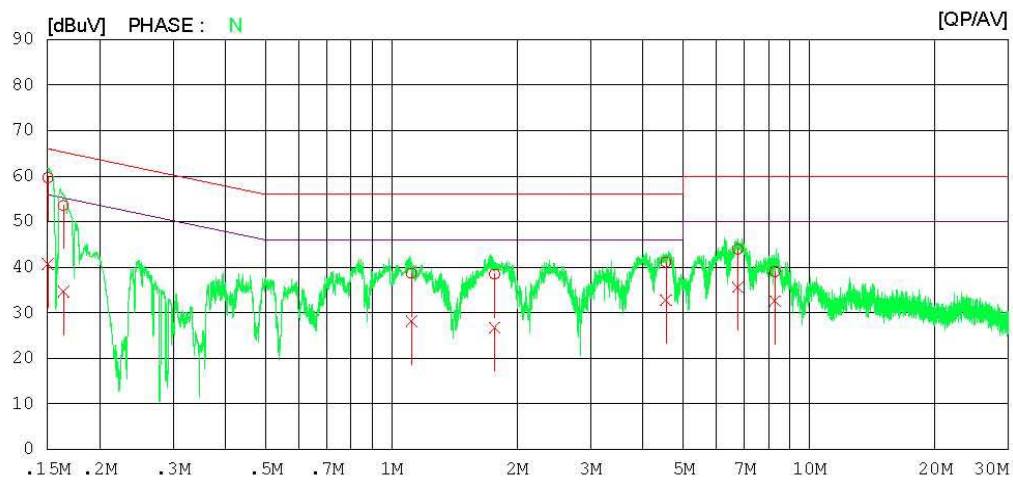
Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : USB

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % R.H.
Operator :

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : USB
Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % 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	0.15056	59.6	40.6	0.1	59.7	40.7	66.0	56.0	6.3	15.3	N
2	0.16391	53.5	34.5	0.1	53.6	34.6	65.3	55.3	11.7	20.7	N
3	1.11600	38.4	28.0	0.2	38.6	28.2	56.0	46.0	17.4	17.8	N
4	1.76620	38.2	26.4	0.3	38.5	26.7	56.0	46.0	17.5	19.3	N
5	4.54200	40.7	32.3	0.4	41.1	32.7	56.0	46.0	14.9	13.3	N
6	6.74940	43.5	35.1	0.5	44.0	35.6	60.0	50.0	16.0	14.4	N
7	8.28620	38.7	32.2	0.4	39.1	32.6	60.0	50.0	20.9	17.4	N
8	0.15056	59.6	41.3	0.1	59.7	41.4	66.0	56.0	6.3	14.6	L1
9	0.16350	53.9	34.9	0.1	54.0	35.0	65.3	55.3	11.3	20.3	L1
10	1.09120	36.7	24.3	0.2	36.9	24.5	56.0	46.0	19.1	21.5	L1
11	1.71180	37.2	25.7	0.3	37.5	26.0	56.0	46.0	18.5	20.0	L1
12	4.54160	40.0	31.5	0.4	40.4	31.9	56.0	46.0	15.6	14.1	L1
13	6.75020	42.2	34.7	0.5	42.7	35.2	60.0	50.0	17.3	14.8	L1
14	8.23740	38.2	31.8	0.4	38.6	32.2	60.0	50.0	21.4	17.8	L1

< VOE MODE >



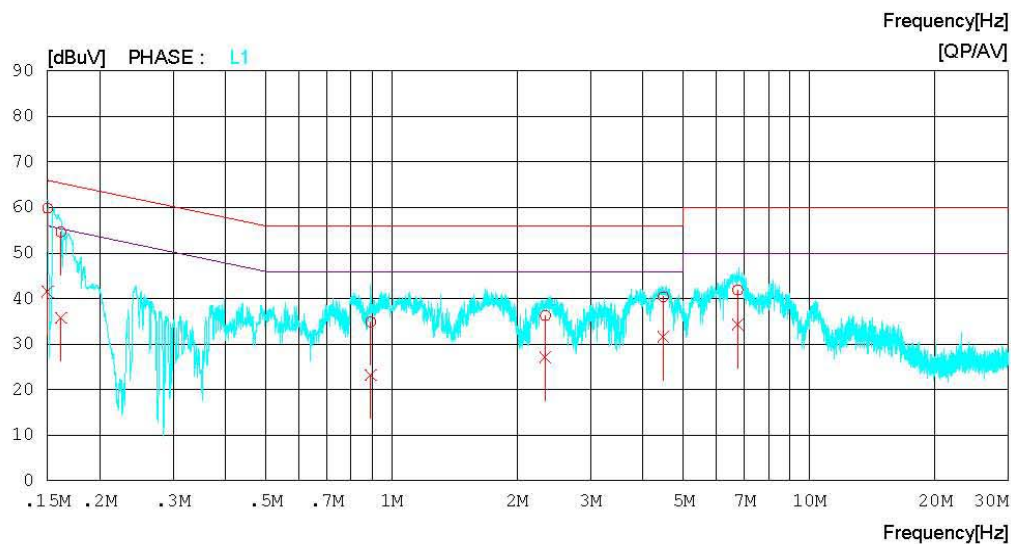
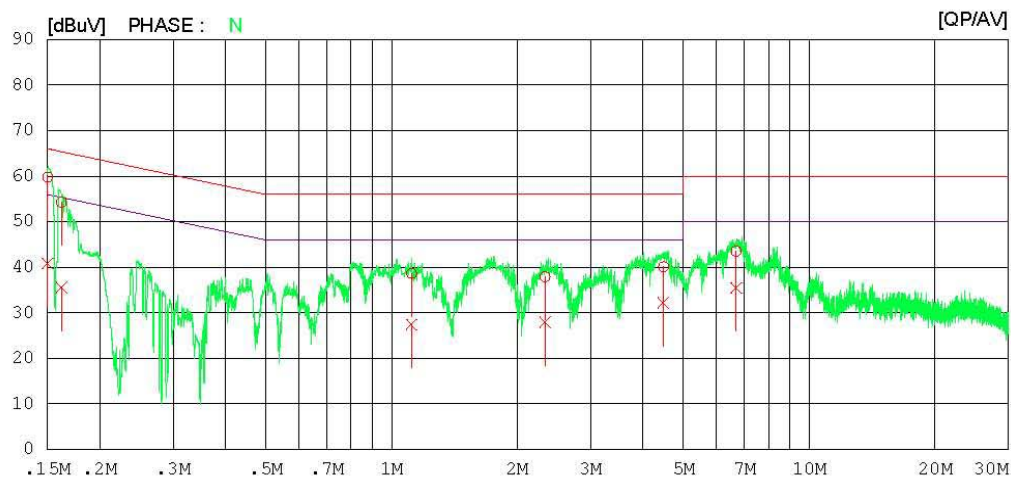
Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No.	: HSTND-3971-G, LD4745tm	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 21 °C 39 % R.H.
Test Condition	: VOE	Operator	:

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

Digital EMC
Date : 2014-02-26

Model No. : HSTND-3971-G, LD4745tm
Type :
Serial No. :
Test Condition : VOE
Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi. : 21 °C 39 % 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	0.15022	59.7	40.7	0.1	59.8	40.8	66.0	56.0	6.2	15.2	N
2	0.16214	54.1	35.5	0.1	54.2	35.6	65.4	55.4	11.2	19.8	N
3	1.11780	38.4	27.2	0.2	38.6	27.4	56.0	46.0	17.4	18.6	N
4	2.33280	37.6	27.6	0.3	37.9	27.9	56.0	46.0	18.1	18.1	N
5	4.48000	39.7	31.8	0.4	40.1	32.2	56.0	46.0	15.9	13.8	N
6	6.68600	43.0	35.0	0.5	43.5	35.5	60.0	50.0	16.5	14.5	N
7	0.15018	59.7	41.4	0.1	59.8	41.5	66.0	56.0	6.2	14.5	L1
8	0.16168	54.5	35.7	0.1	54.6	35.8	65.4	55.4	10.8	19.6	L1
9	0.89123	34.7	23.0	0.2	34.9	23.2	56.0	46.0	21.1	22.8	L1
10	2.33560	36.0	26.9	0.3	36.3	27.2	56.0	46.0	19.7	18.8	L1
11	4.47640	40.0	31.2	0.4	40.4	31.6	56.0	46.0	15.6	14.4	L1
12	6.74600	41.4	33.8	0.5	41.9	34.3	60.0	50.0	18.1	15.7	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 and CAN/CSA-CISPR 22-10**.

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

< 30 MHz ~ 1 GHz _ DISPLAY MODE >

RADIATED EMISSION

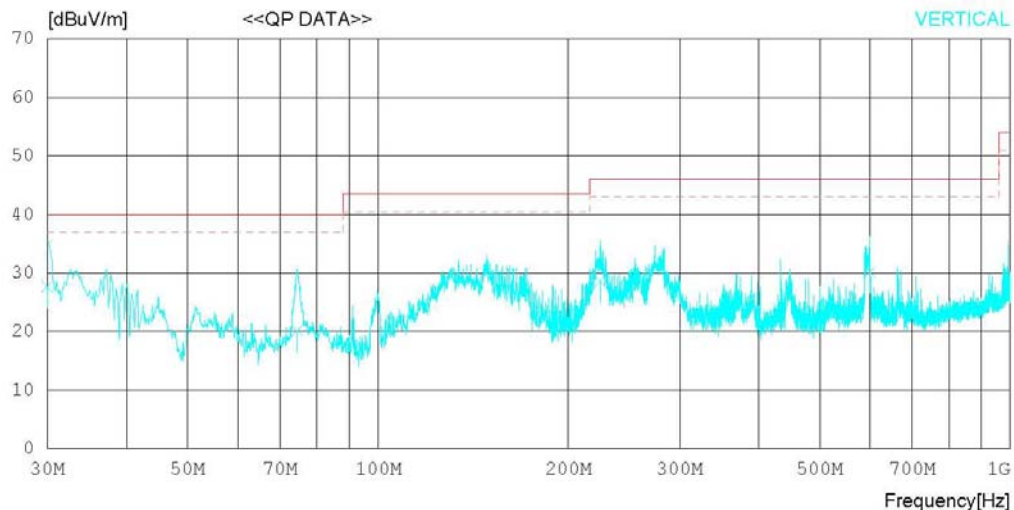
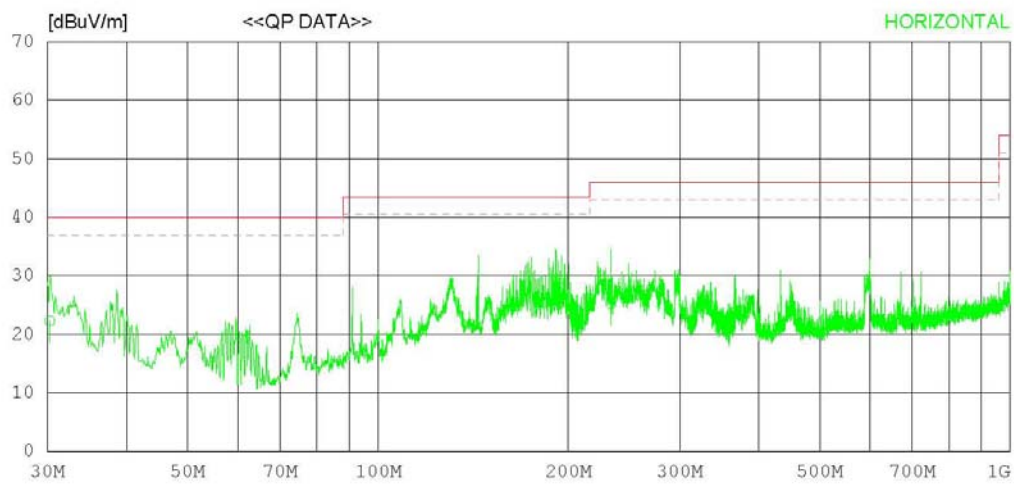
Date : 2014-02-27

Model Name : HSTND-3971-G, LD4745tm
Model No. :
Serial No. :
Test Condition : DP

Reference No. :
Power Supply : 120 V 60 Hz
Temp/Humi : 21 °C 36 % R.H.
Operator :

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: DP	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	30.243	26.3	17.7	0.9	22.6	22.3	40.0	17.7	301	125
2	193.077	38.7	9.7	1.8	23.0	27.2	43.5	16.3	100	97
3	233.331	34.7	11.7	2.1	23.2	25.3	46.0	20.7	100	205
----- Vertical -----										
4	30.000	31.5	17.9	0.9	22.6	27.7	40.0	12.3	299	328
5	74.498	34.9	6.7	1.3	22.7	20.2	40.0	19.8	199	94
6	224.965	38.5	11.2	2.1	23.2	28.6	46.0	17.4	199	303
7	600.366	32.1	18.7	3.7	24.3	30.2	46.0	15.8	100	74

< (1 ~ 6) GHz_Peak _ DISPLAY MODE >

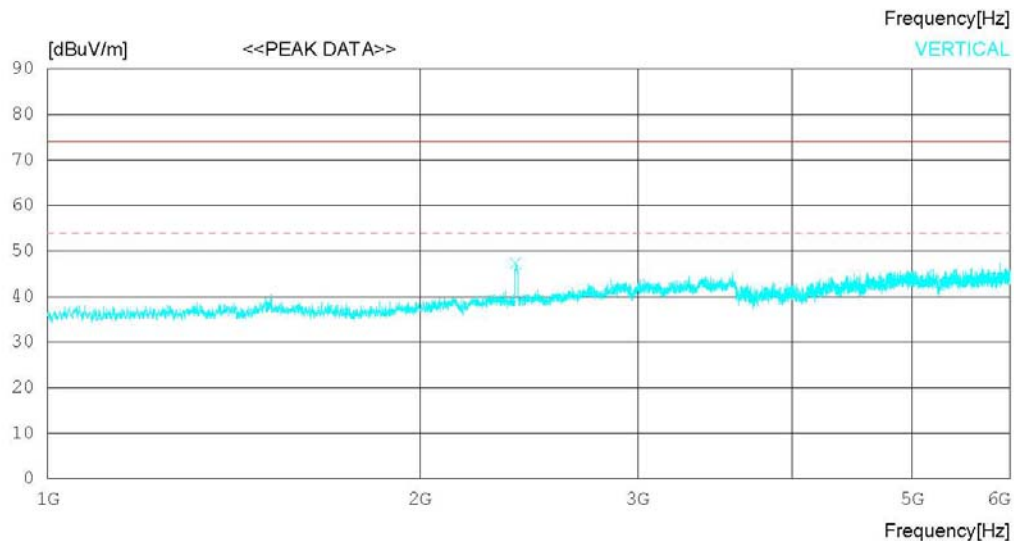
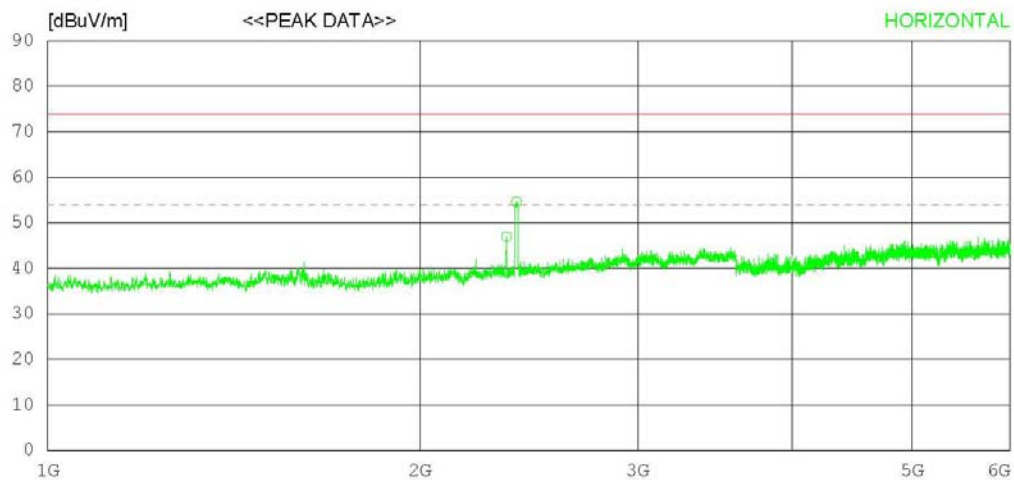
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % R.H.
Test Condition	: DP	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 °C 36 % R.H.
Test Condition	: DP	Operator	:	

Memo :

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	2350.000	54.3	26.9	5.1	39.3	47.0	74.0	27	100	205
2	2392.500	61.8	27.0	5.1	39.3	54.6	74.0	19.4	100	359
----- Vertical -----										
3	2390.000	54.5	27.0	5.1	39.3	47.3	74.0	26.7	100	128

< (1 ~ 6) GHz_Average _ DISPLAY MODE >

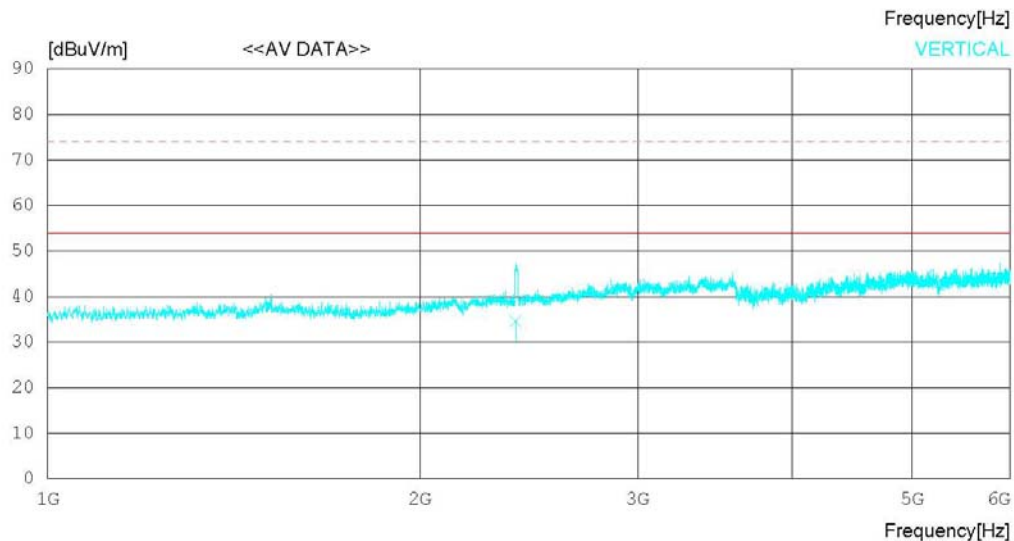
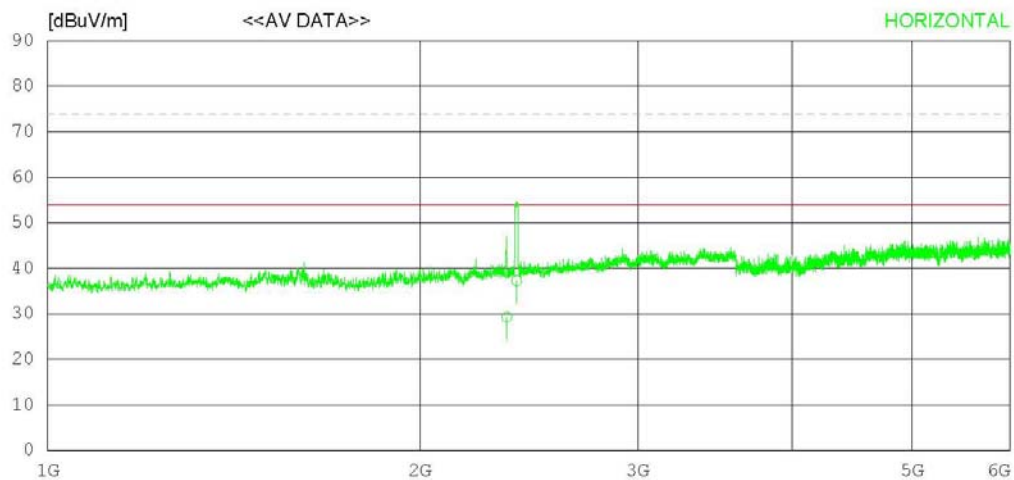
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % R.H.
Test Condition	: DP	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 'C 36 % R.H.
Test Condition	: DP	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	2350.850	36.6	26.9	5.1	39.3	29.3	54.0	24.7	100	205
2	2394.300	44.5	27.0	5.1	39.3	37.3	54.0	16.7	100	301
----- Vertical -----										
3	2390.505	41.8	27.0	5.1	39.3	34.6	54.0	19.4	100	142

< 30 MHz ~ 1 GHz _ DSUB MODE >

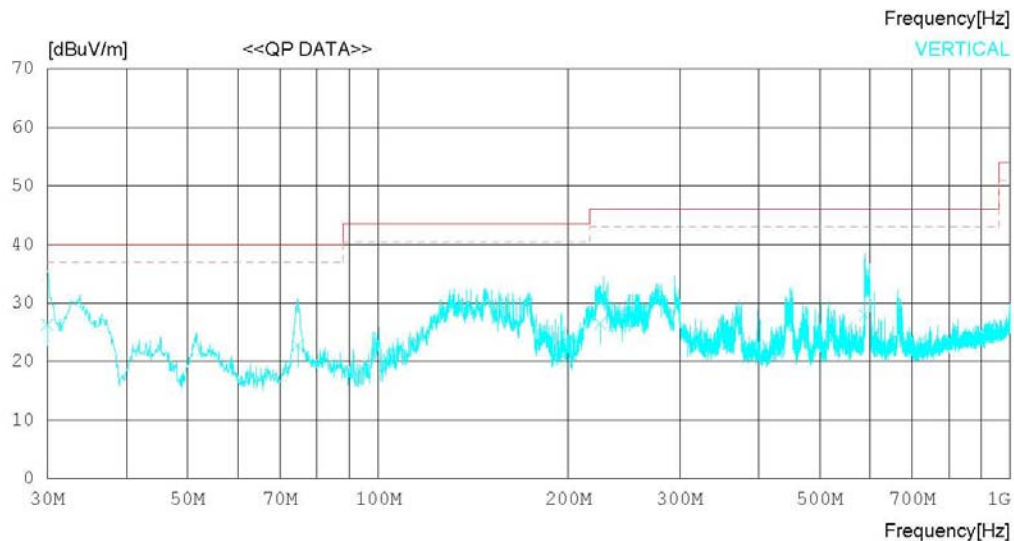
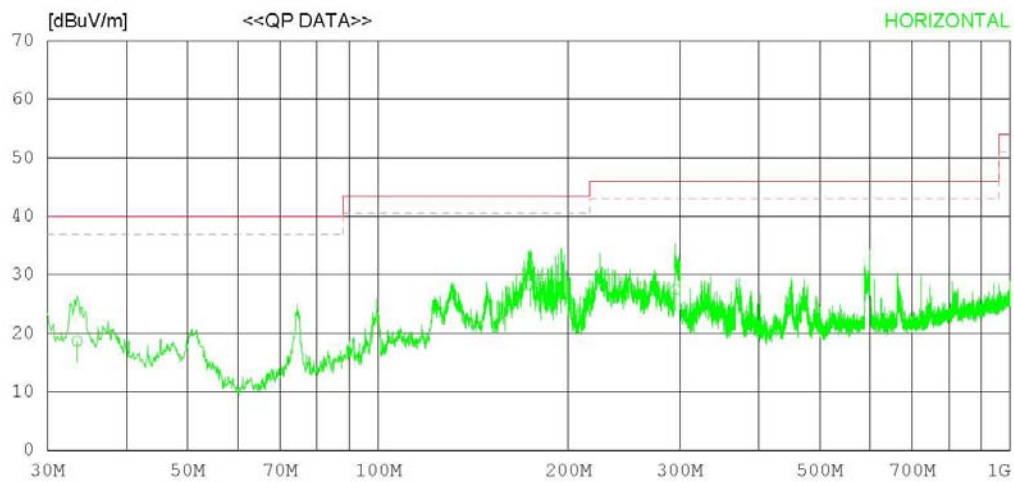
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: DSUB	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % 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	33.395	24.3	16.1	0.9	22.6	18.7	40.0	21.3	301	115
2	174.527	39.5	9.8	1.8	22.8	28.3	43.5	15.2	100	301
3	295.288	35.2	13.6	2.3	23.6	27.5	46.0	18.5	100	205
----- Vertical -----										
4	30.000	30.1	17.9	0.9	22.6	26.3	40.0	13.7	199	74
5	74.620	37.5	6.7	1.3	22.7	22.8	40.0	17.2	100	114
6	224.623	36.5	11.2	2.1	23.2	26.6	46.0	19.4	199	178
7	588.966	30.2	18.5	3.6	24.3	28.0	46.0	18.0	100	228

< (1 ~ 6) GHz_Peak _ DSUB MODE >

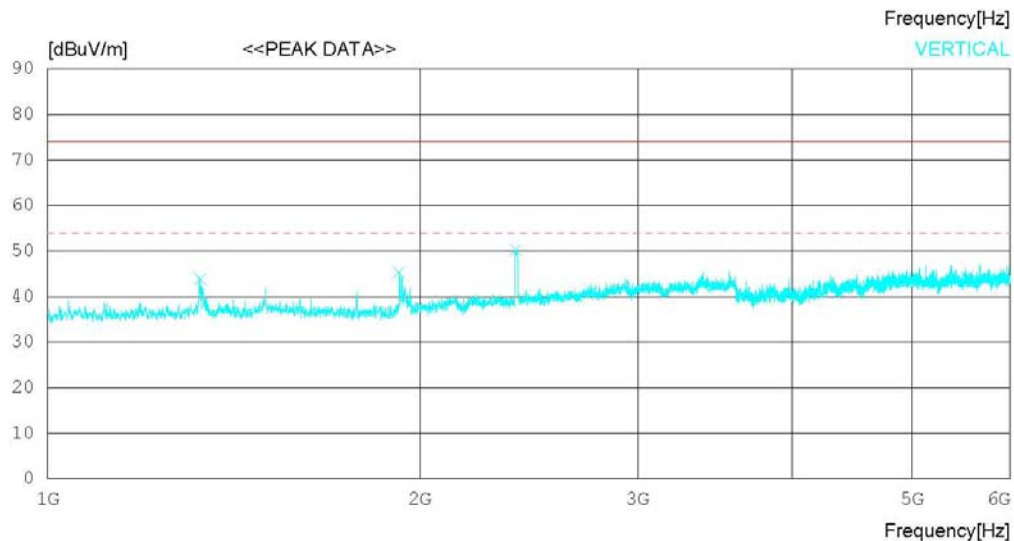
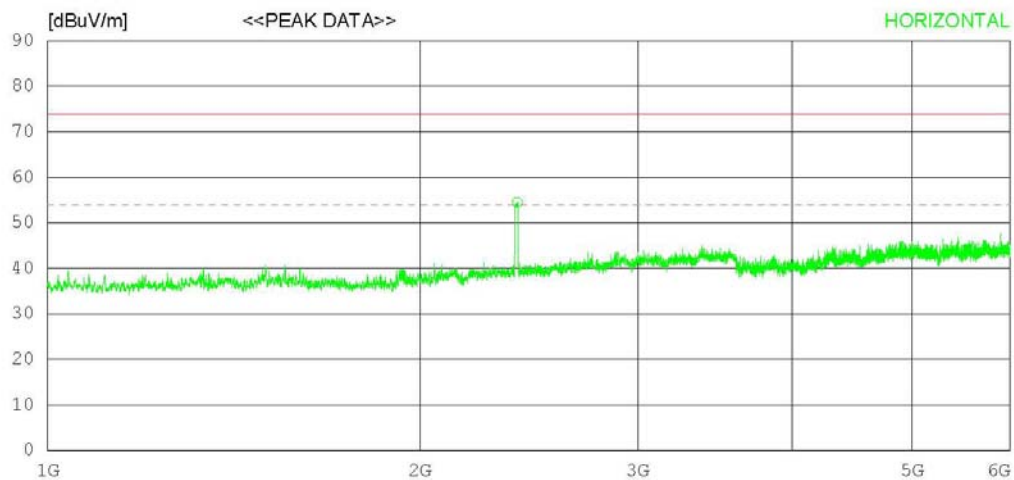
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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)



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	2397.500	61.7	27.0	5.1	39.3	54.5	74.0	19.5	101	165
----- Vertical -----										
2	1330.000	55.3	25.1	3.8	40.4	43.8	74.0	30.2	101	182
3	1924.375	54.5	25.8	4.6	39.6	45.3	74.0	28.7	101	26
4	2390.625	57.5	27.0	5.1	39.3	50.3	74.0	23.7	101	1

< (1 ~ 6) GHz_Average _ DSUB MODE >

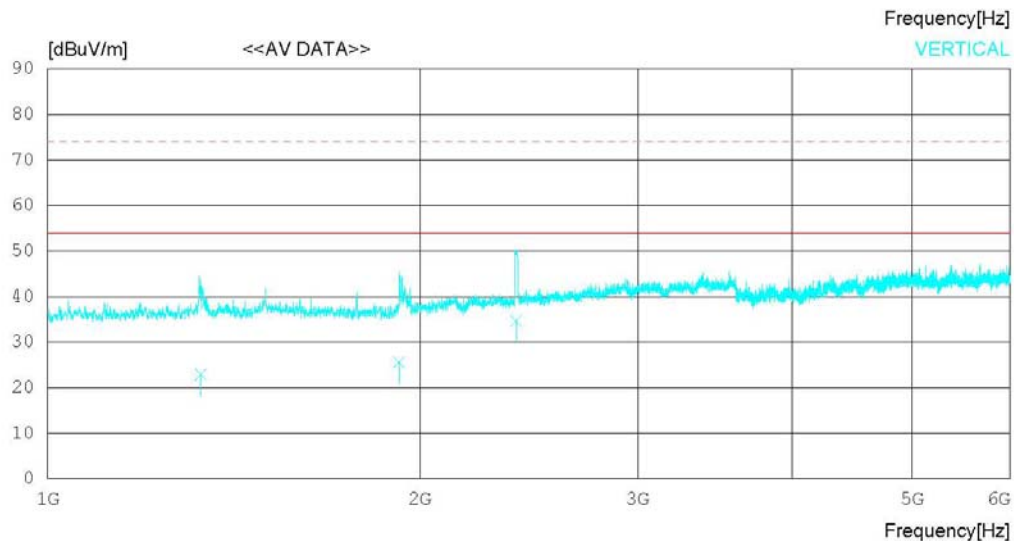
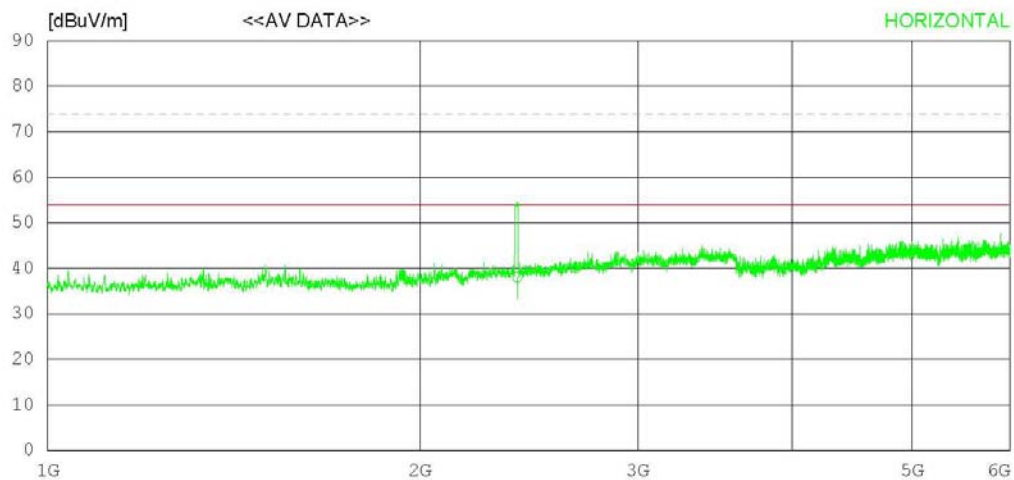
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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)



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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	2396.862	45.3	27.0	5.1	39.3	38.1	54.0	15.9	101	195
----- Vertical -----										
2	1330.000	34.4	25.1	3.8	40.4	22.9	54.0	31.1	101	182
3	1923.632	34.8	25.8	4.6	39.6	25.6	54.0	28.4	101	26
4	2392.680	41.8	27.0	5.1	39.3	34.6	54.0	19.4	101	1

< 30 MHz ~ 1 GHz _ HDMI MODE >

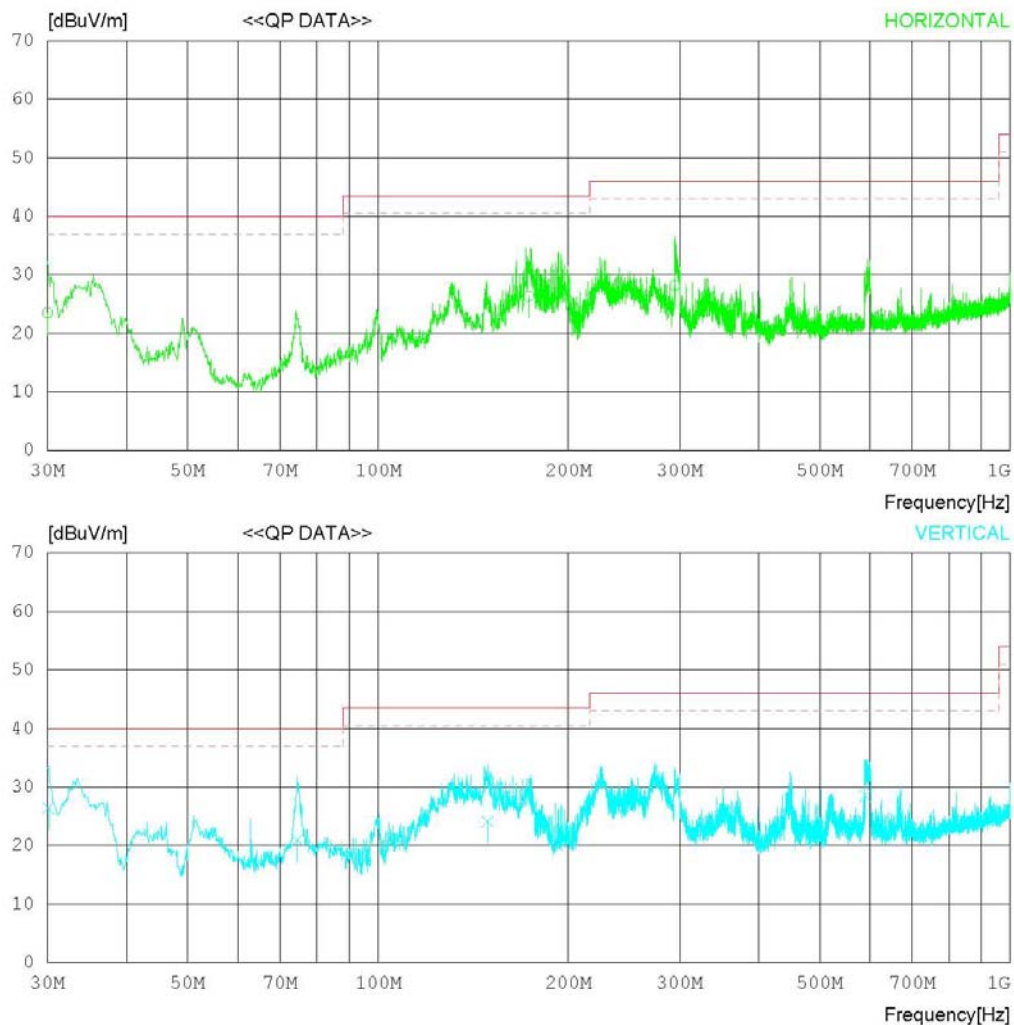
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: HDMI	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % 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	30.000	27.3	17.9	0.9	22.6	23.5	40.0	16.5	300	105
2	173.206	37.6	9.8	1.8	22.8	26.4	43.5	17.1	100	309
3	294.924	35.9	13.6	2.3	23.6	28.2	46.0	17.8	100	225
----- Vertical -----										
4	30.121	30.3	17.8	0.9	22.6	26.4	40.0	13.6	199	140
5	74.498	35.7	6.7	1.3	22.7	21.0	40.0	19.0	100	120
6	149.065	34.7	10.5	1.7	22.8	24.1	43.5	19.4	100	74
7	590.152	30.6	18.6	3.6	24.3	28.5	46.0	17.5	100	212

< (1 ~ 6) GHz_Peak _ HDMI MODE >

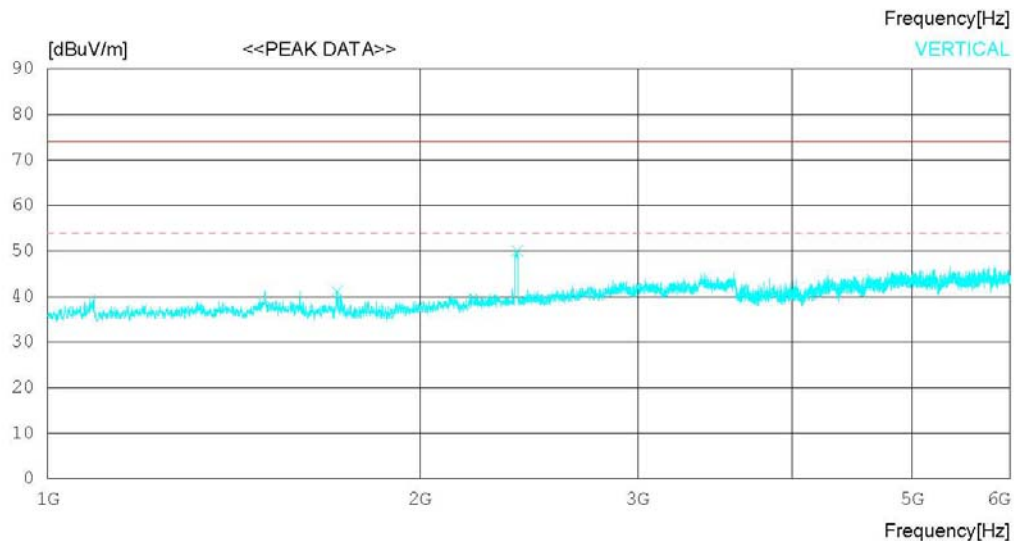
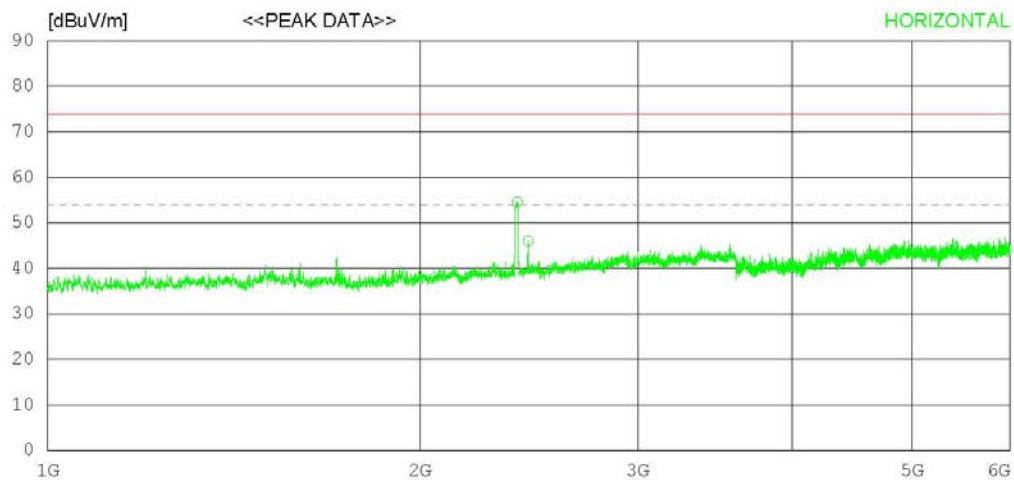
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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 : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 'C 36 % 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	2397.500	61.8	27.0	5.1	39.3	54.6	74.0	19.4	100	358
2	2446.250	52.9	27.2	5.2	39.3	46.0	74.0	28	100	358
----- Vertical -----										
3	1714.375	51.2	25.5	4.3	39.8	41.2	74.0	32.8	100	172
4	2396.875	57.3	27.0	5.1	39.3	50.1	74.0	23.9	100	1

< (1 ~ 6) GHz_Average _ HDMI MODE >

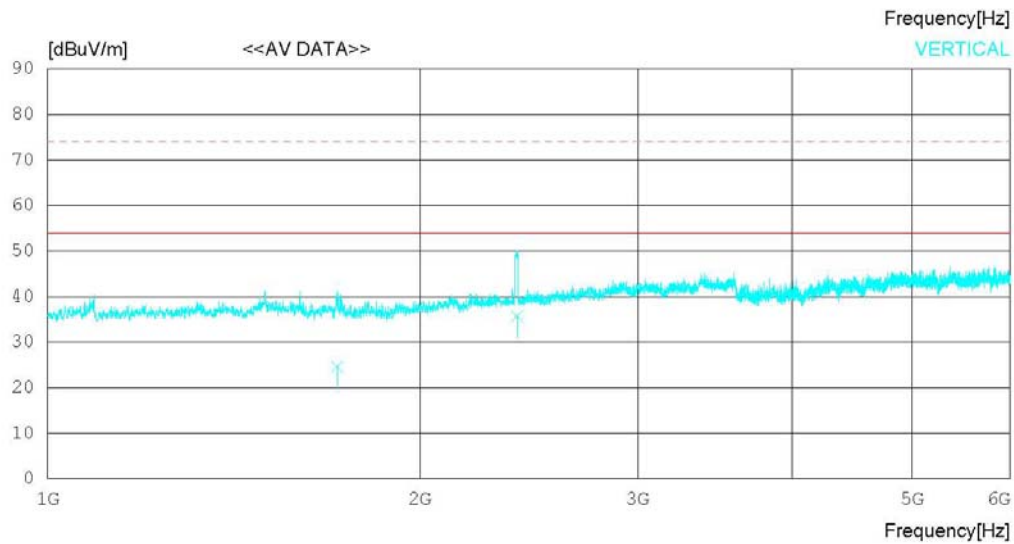
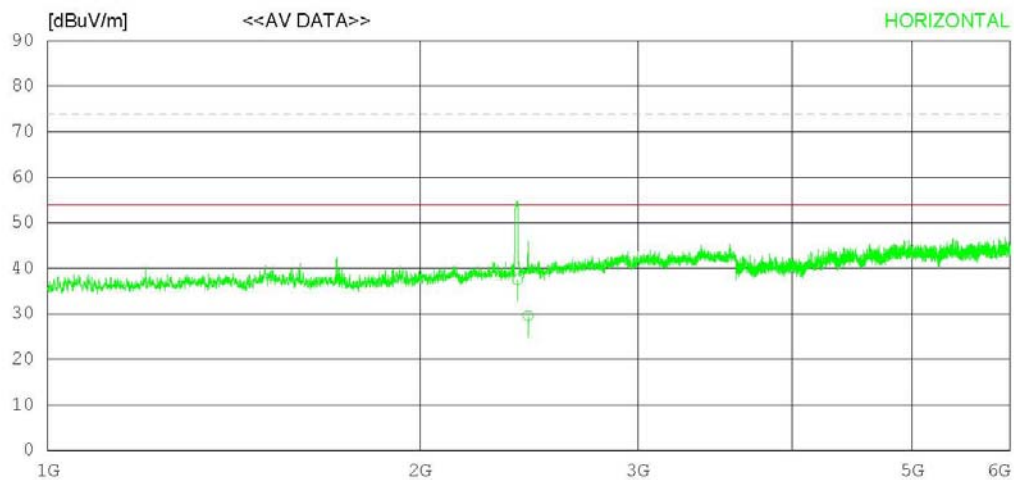
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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 : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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	2398.800	44.7	27.0	5.1	39.3	37.5	54.0	16.5	100	175
2	2446.250	36.5	27.2	5.2	39.3	29.6	54.0	24.4	100	225
----- Vertical -----										
3	1715.518	34.5	25.5	4.4	39.8	24.6	54.0	29.4	100	143
4	2397.480	42.9	27.0	5.1	39.3	35.7	54.0	18.3	100	97

< 30 MHz ~ 1 GHz _ USB MODE >

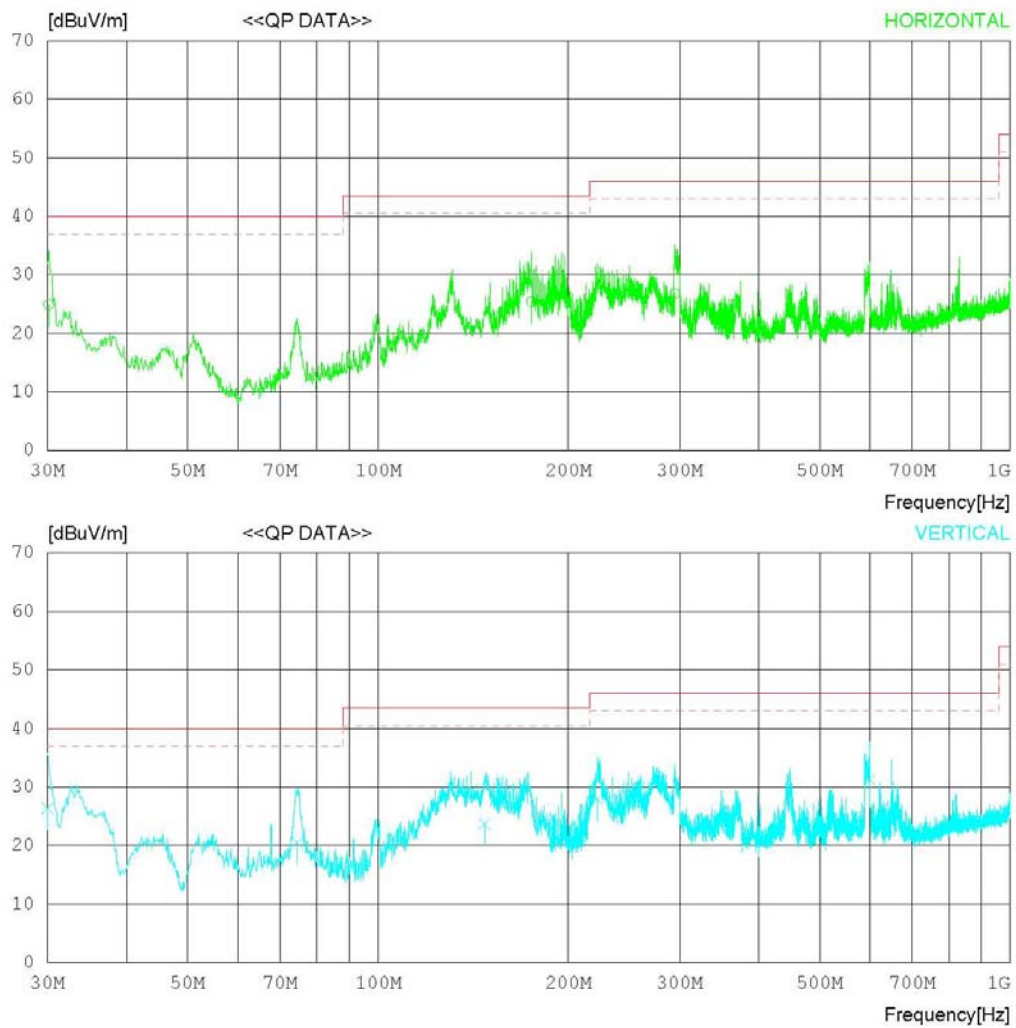
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: USB	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % 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	30.121	28.8	17.8	0.9	22.6	24.9	40.0	15.1	301	79
2	174.769	36.6	9.8	1.8	22.8	25.4	43.5	18.1	100	304
3	294.561	34.5	13.6	2.3	23.6	26.8	46.0	19.2	100	88
----- Vertical -----										
4	30.000	30.2	17.9	0.9	22.6	26.4	40.0	13.6	199	205
5	74.498	35.2	6.7	1.3	22.7	20.5	40.0	19.5	100	285
6	147.362	34.3	10.5	1.7	22.8	23.7	43.5	19.8	100	56
7	222.540	38.0	11.0	2.1	23.2	27.9	46.0	18.1	199	336
8	599.638	33.3	18.7	3.6	24.3	31.3	46.0	14.7	100	208

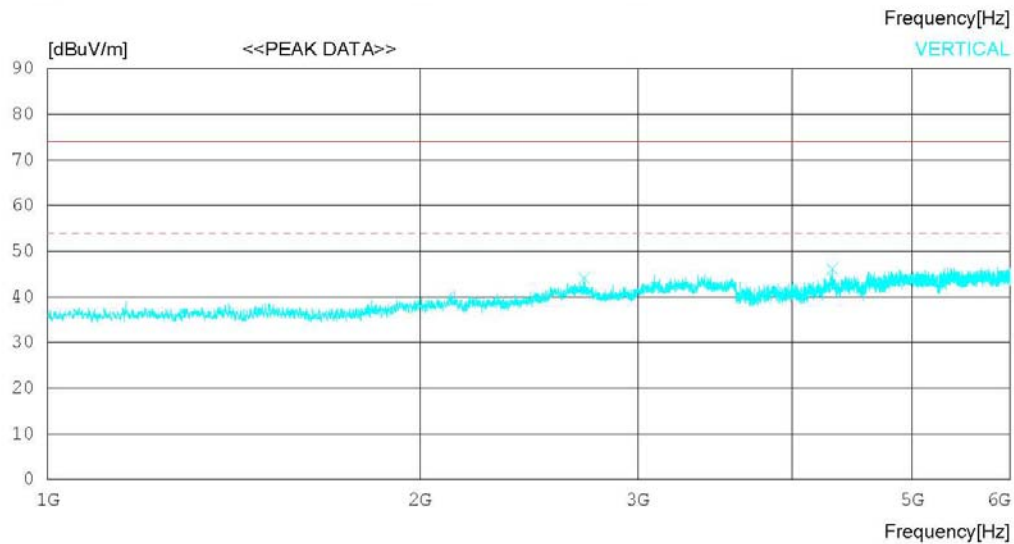
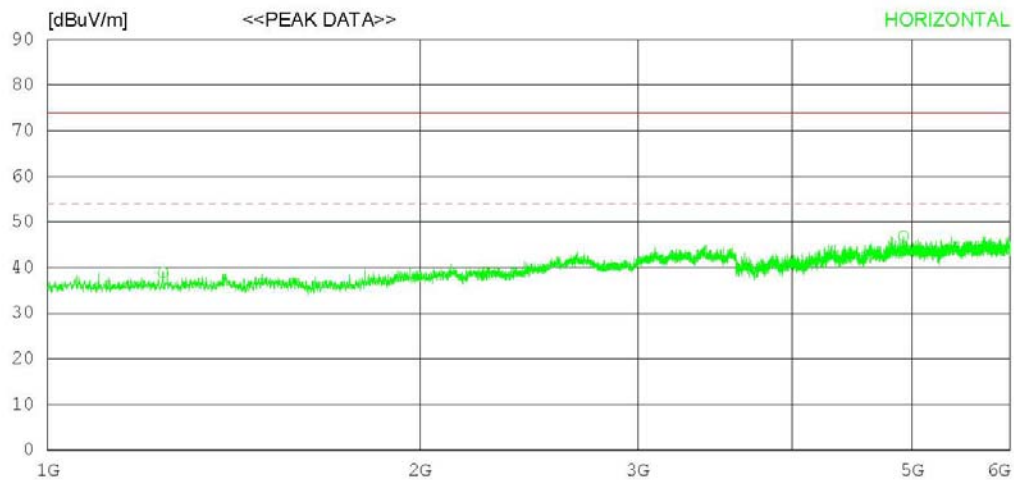
< (1 ~ 6) GHz_Peak _ USB MODE >

RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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 : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 'C 36 % 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	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1240.000	50.8	25.0	3.7	40.6	38.9	74.0	35.1	100	176
2	4918.750	46.4	31.5	7.8	38.8	46.9	74.0	27.1	100	244
----- Vertical -----										
3	2715.000	50.0	28.0	5.4	39.3	44.1	74.0	29.9	100	96
4	4308.125	47.5	30.3	6.9	38.5	46.2	74.0	27.8	100	42

< (1 ~ 6) GHz_Average _ USB MODE >

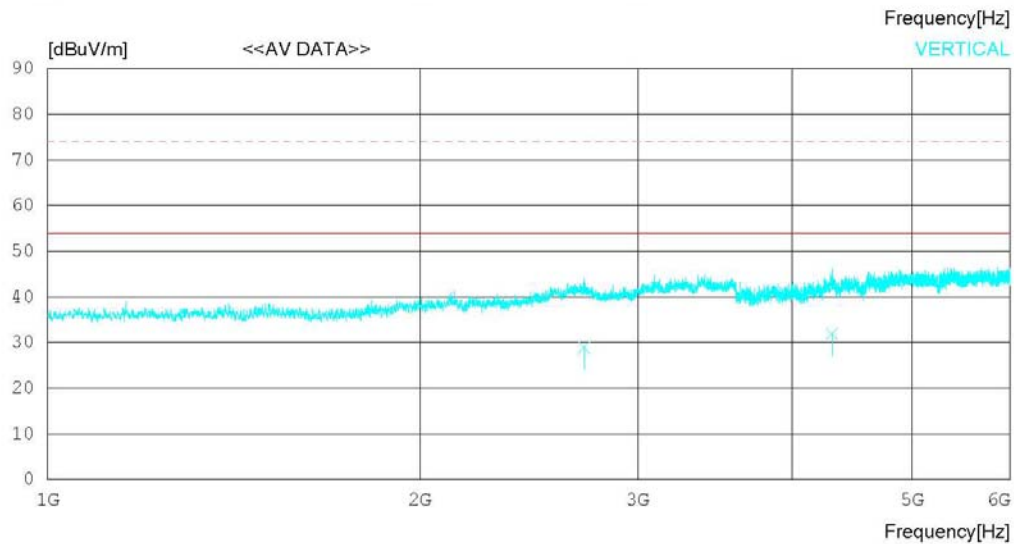
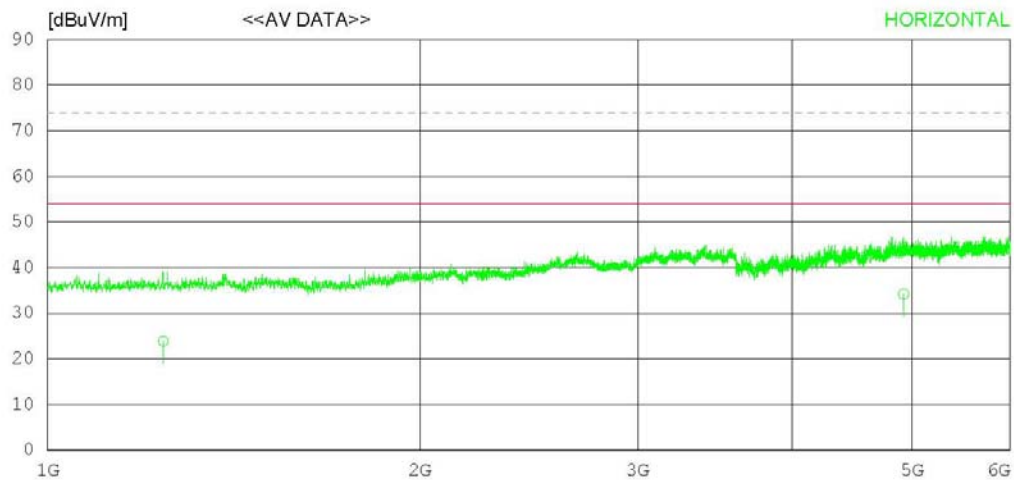
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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 : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % 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	1240.510	35.8	25.0	3.7	40.6	23.9	54.0	30.1	100	195
2	4921.116	33.7	31.5	7.8	38.8	34.2	54.0	19.8	100	228
----- Vertical -----										
3	2715.450	34.8	28.0	5.4	39.3	28.9	54.0	25.1	100	124
4	4307.808	33.2	30.3	6.9	38.5	31.9	54.0	22.1	100	97

< 30 MHz ~ 1 GHz _ VOE MODE >

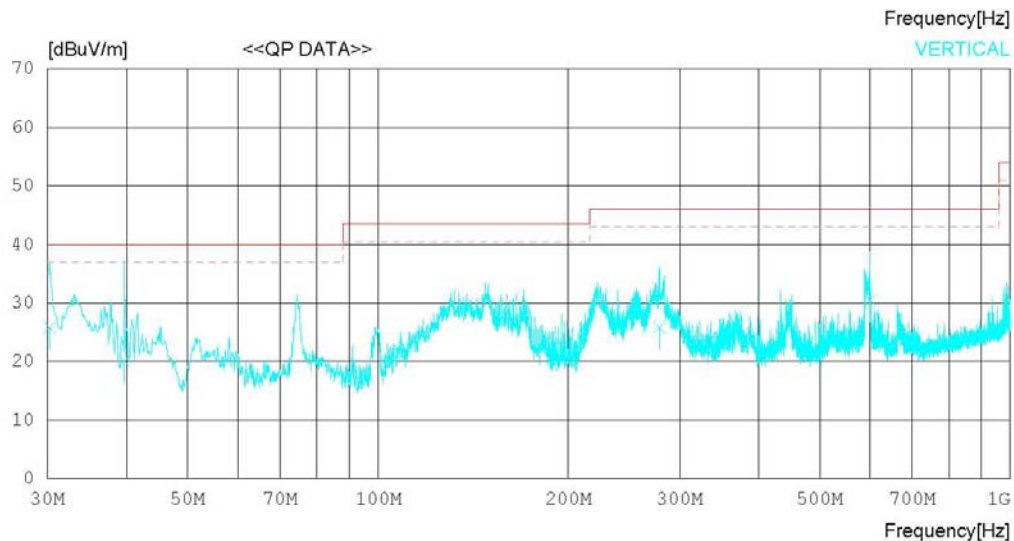
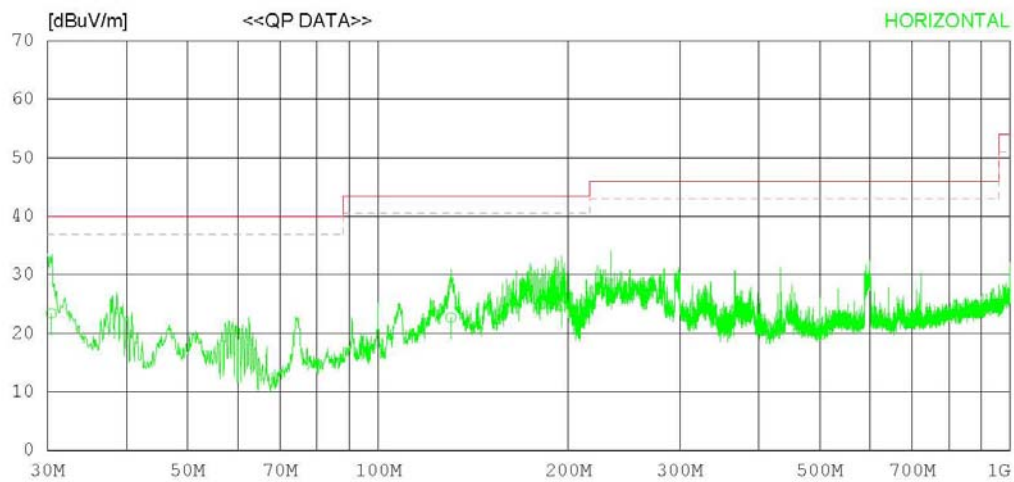
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: VOE	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 °C 36 % R.H.
Test Condition	: VOE	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	30.434	27.5	17.6	0.9	22.6	23.4	40.0	16.6	301	206
2	130.393	32.4	11.5	1.6	22.8	22.7	43.5	20.8	201	326
3	195.132	36.2	9.7	1.9	23.1	24.7	43.5	18.8	100	315
----- Vertical -----										
4	30.243	29.8	17.7	0.9	22.6	25.8	40.0	14.2	199	305
5	39.700	28.7	13.0	1.0	22.6	20.1	40.0	19.9	400	199
6	278.556	33.8	13.3	2.3	23.5	25.9	46.0	20.1	100	170
7	600.245	32.4	18.7	3.7	24.3	30.5	46.0	15.5	100	74

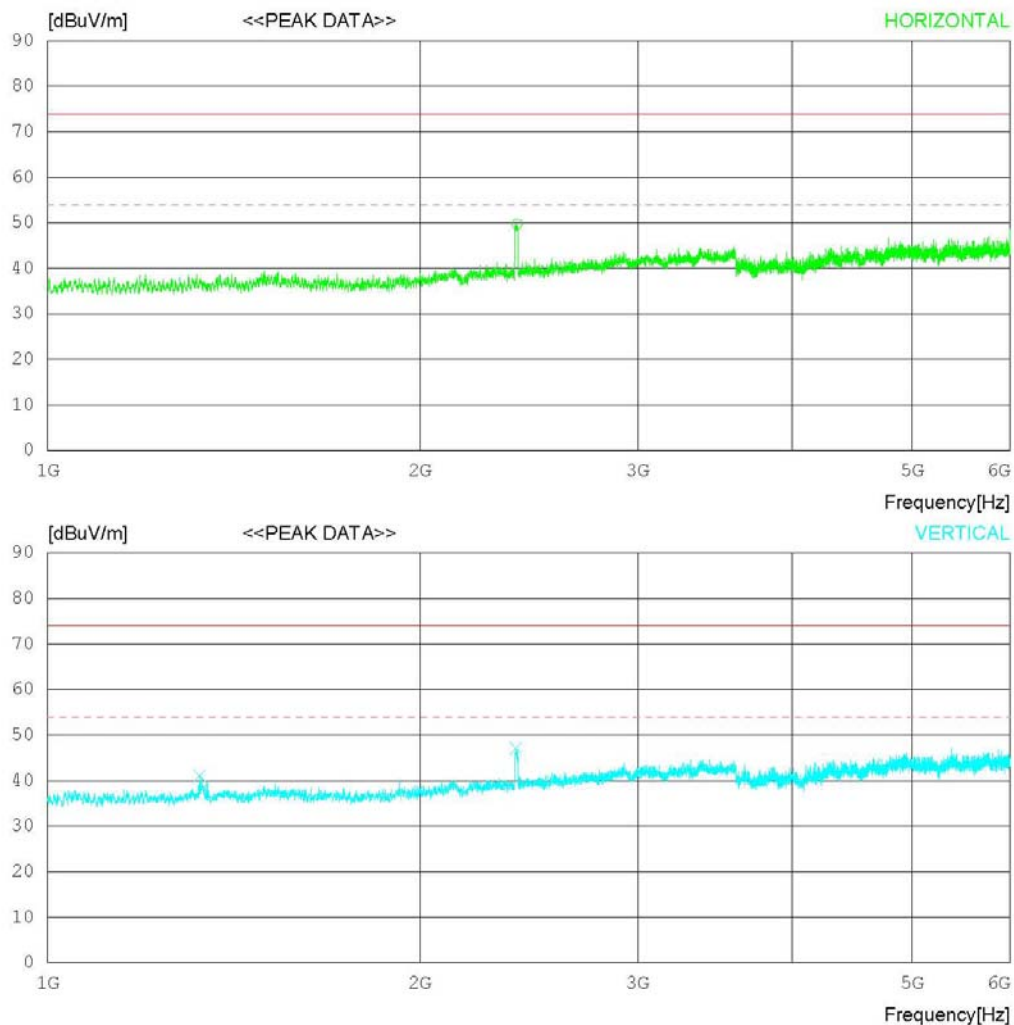
< (1 ~ 6) GHz_Peak _ VOE MODE >

RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % R.H.
Test Condition	: VOE	Operator	:
Memo	:		

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 'C 36 % R.H.
Test Condition	: VOE	Operator	:	

Memo :

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	2395.625	56.9	27.0	5.1	39.3	49.7	74.0	24.3	100	358
----- Vertical -----										
2	1327.500	52.6	25.1	3.8	40.4	41.1	74.0	32.9	100	0
3	2390.625	54.3	27.0	5.1	39.3	47.1	74.0	26.9	100	0

< (1 ~ 6) GHz_Average _ VOE MODE >

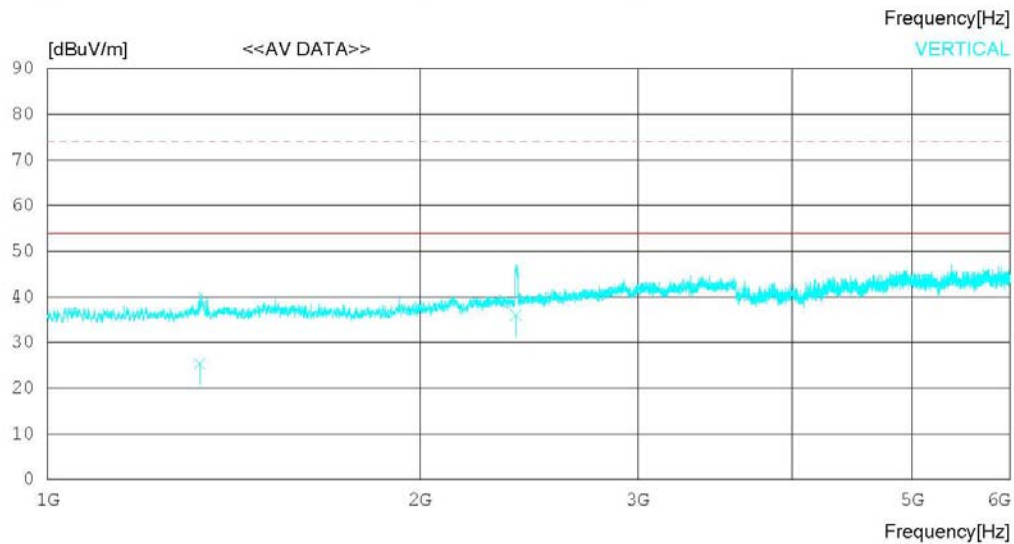
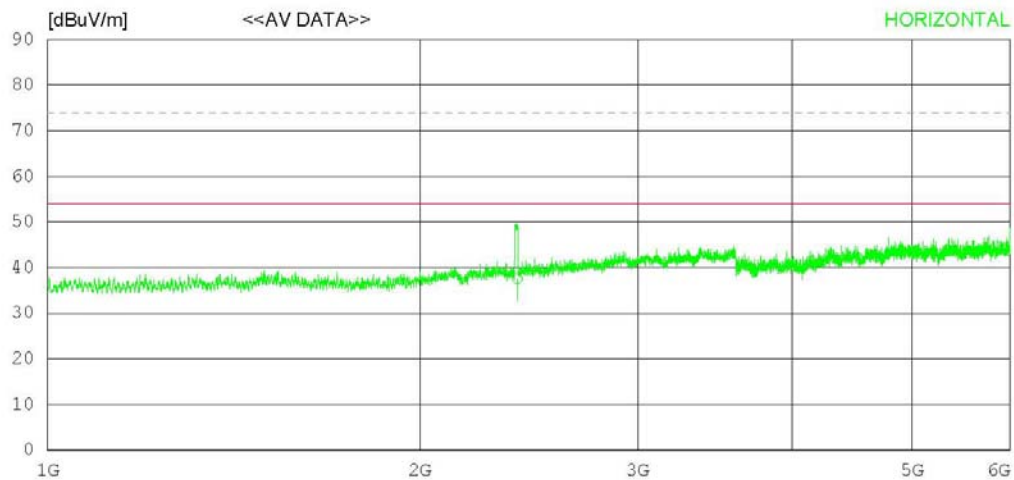
RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:
Model No.	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi	: 21 'C 36 % R.H.
Test Condition	: VOE	Operator	:

Memo :

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



RADIATED EMISSION

Date : 2014-02-27

Model Name	: HSTND-3971-G, LD4745tm	Reference No.	:	
Model No.	:	Power Supply	:	120 V 60 Hz
Serial No.	:	Temp/Humi	:	21 'C 36 % R.H.
Test Condition	: VOE	Operator	:	

Memo :

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
		AV	FACTOR							
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	2396.600	44.8	27.0	5.1	39.3	37.6	54.0	16.4	100	206
----- Vertical -----										
2	1327.622	36.9	25.1	3.8	40.4	25.4	54.0	28.6	100	108
3	2391.458	43.2	27.0	5.1	39.3	36.0	54.0	18.0	100	98

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	2014.02.27	2015.02.27
☐ RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2013.06.28	2014.06.28
☐ LISN	KNW-407	KYORITSU	8-317-8	2014.01.08	2015.01.08
☐ LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2013.06.27	2014.06.27
☐ 50 OHM TERMINATOR	CT-01	TME	N/A	2014.01.08	2015.01.08
☒ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2014.02.27	2015.02.27
☒ LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2013.09.12	2014.09.12
☒ LISN	LISN1600	TTI	197204	2013.06.28	2014.06.28
☒ 50 OHM TERMINATOR	CT-01	TME	N/A	2014.01.08	2015.01.08

2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒ EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2014.01.08	2015.01.08
☒ BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
☒ HORN ANTENNA	BBHA9120D	SCHWARZBECK	1014	2012.10.21	2014.10.21
☒ AMPLIFIER	8447E	H/P	2945A02865	2014.01.08	2015.01.08
☒ AMPLIFIER	8449B	AGILENT	3008A01590	2013.02.27	2014.02.27
☐ SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2013.06.27	2014.06.27
☐ AMPLIFIER	8447D	AGILENT	2443A03690	2013.06.28	2014.06.28
☐ EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2014.02.27	2015.02.27
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
☐ LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.10.04	2014.10.04
☐ BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2013.05.16	2015.05.16
☐ LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	0411	2013.05.16	2015.05.16
☐ AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2014.02.28	2015.02.28

Appendix 2

Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
None	Original	N/A	N/A