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FCC Test Report

for

LCD TV

Applicant : **LG Electronics Inc.**

Model Number : **22LV255C-UA**

Manufacturer : **LG Electronics Inc.**

Test Standard : **ANSI C 63.4:2003**
FCC Part 15 Subpart B
(Type of Device : Class B Computing Device Peripheral (JBP))

Date of Tests : **May 02 ~ 03, 2011**

Date of Issue : **May 11, 2011**

Tested by : D.H.EUN/Assistant Manager

Reviewed by : Y.K.SHIN/Manager

CONTENTS

1. General Remarks

This Report describes the emission characteristics of the tested product.

If the product will be used with additional equipment other than those mentioned in this report or if the tested product will be used against the manufacture's specifications, the compliance with the relevant standards for the system has to be ensured.

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	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KCC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1028C	ISO/IEC 17025

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

DIGITAL EMC CO., LTD.
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3. General Information of EUT

3.1 Product Information

Equipment under Test	LCD TV
Model No.	22LV255C-UA
Serial No	NONE
Type of Sample Tested	Pre-Production
Rating Power Supply (Use for Adaptor)	Model No.: PA-1061-61 Manufacturer : Dongguang Lite Power 2nd Plant Input : AC100-240V, 50/60Hz, 1.5A Output : DC24V, 2.5A
High Frequency	533MHz
Supplied Power for Test	AC120V, 60Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea
Factory	LG Electronics Reynosa, Inc. LG Electronics USA, Inc_Reynosa 9801 South Cage Blvd. Suite 3F Pharr, TX. 78577
Date of Receipt of Sample	2011-04-28

< Product Specifications >

RGB (PC), HDMI (PC) supported mode (LCD)

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
1280x768 RGB-PC	47.776	59.870
1280x1024	63.981	60.02
1920x1080 RGB-PC	66.587	59.934
1920x1080 HDMI-PC	67.5	60.00

For 22LV2500, 32/37/42/47/55LV3500, 32/42LV3520, 55LV5300, 42/47/55LW5000, 47/55LW5300, 32/42LK430, 32/37/42/47LK450, 42/47LK451C, 42/47/55LK520

4. Test Summary

4.1 Summary of tests

The applied standards to evaluate the compliance of requirements is 47CFR Part 15, Subpart B and the measurement procedures specified in ANSI C63.4 are performed.

Test Items	Applied Standards	Status
Emission		
Conducted Emission	FCC Part 15 Subpart B	C
Radiated Emission	FCC Part 15 Subpart B	C
Note 1: C=Conform NC=Not Conform NT=Not Tested NA=Not Applicable		

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 1280*768 MAX, “H” character scroll
- HDMI mode : Resolution 1360*768 MAX, “H” character scroll
- SIDE HDMI mode : Colorbar mode
- USB mode : USB file play

EUT is the following operational conditions apply:

a) Set the contrast control to maximum.

b) Set the brightness control to maximum or at raster extinction if raster extinction occurs at less thanmaximum brightness.

c) For color monitors, use white letters on a black background to represent all colors.

d) Select the worse case of positive or negative video if both alternatives are available.

e) Set character size and number of characters per line so that the typical maximum number of charac-ters per screen is displayed.

f) For a monitor that has no graphics capabilities, regardless of the video card used, a pattern consistingof random text shall be displayed. For a monitor with graphics capability, even though another videocard may be needed to accomplish a graphic display, a screen pattern consisting of lines of scrollingH’s should be displayed. For a monitor that has no text capabilities, use a typical display. That pat-tern should be used for the remainder of the tests.

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	shield		
PC	VOSTRO430	9K77SBX	DELL	Power DSUB HDMI	1.8 1.6 1.8	Non-shield Non-shield Shield	Plastic Plastic Plastic	DOC
Keyboard	SKG-210P	TAKSC12254A	MONITEREY INTERNATIONAL CORP	PS/2	1.8	Non-shield	Plastic	DOC
Mouse	SML-510P	TAKS700467Y	MONITEREY INTERNATIONAL CORP	PS/2	1.6	Non-shield	Plastic	DOC
Printer	SRP-770	N/A	BIXOLON	Power RS-232C	1.8 1.8	Non-shield Non-shield	Plastic	DOC
USB Memory	X1	N/A	AXXEN	USB	-	-	Plastic	DOC
Headset	COV903	N/A	COSY	Stereo	2.0	Non-shield	Plastic	DOC
Speaker	IP-100	N/A	Macally	Stereo	0.5	Non-shield	Plastic	DOC

6. Test Results : Emission

6.1 Conducted Emission

RESULT : COMPLY

6.1.1 Measurement Procedure

In the range of 0.15MHz to 30MHz, the conducted emission was measured and set-up was made accordance with **ANSI C63.4:2003.**

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 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 TSJ conducted emission test software, the emissions were scanned from 150KHz to 30MHz 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 List of Test and Measurement Instruments

Name of Instrument	Model No.	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
EMI TEST RECEIVER	ESCI	100364	R&S	2011.03.08	2012.03.08
DC BLOCK	KFL-007	7-1581-5	Hyuplip	-	-
LISN	LISN1600	197204	TTI	2010.07.02	2011.07.02
LISN(EUT)	ESH2-Z5	828739/006	R&S	2010.10.01	2011.10.01
50 ohm Terminator	CT-01	N/A	TME	2011.01.11	2012.01.11

6.1.3 Limit for Conducted Emission

(1) Conducted Emission at mains ports of class A

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	79	66
0.50 to 30	73	60
Note The lower limit shall apply at the transition frequencies.		

(2) Conducted Emission at mains ports of class B

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	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.		

6.1.4 Test Result

Test date	May 02, 2011
Ambient Temperature	20 ℃
Relative Humidity	38 % R.H.

Result : For the measurement data, see next page.

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 >

Digital EMC

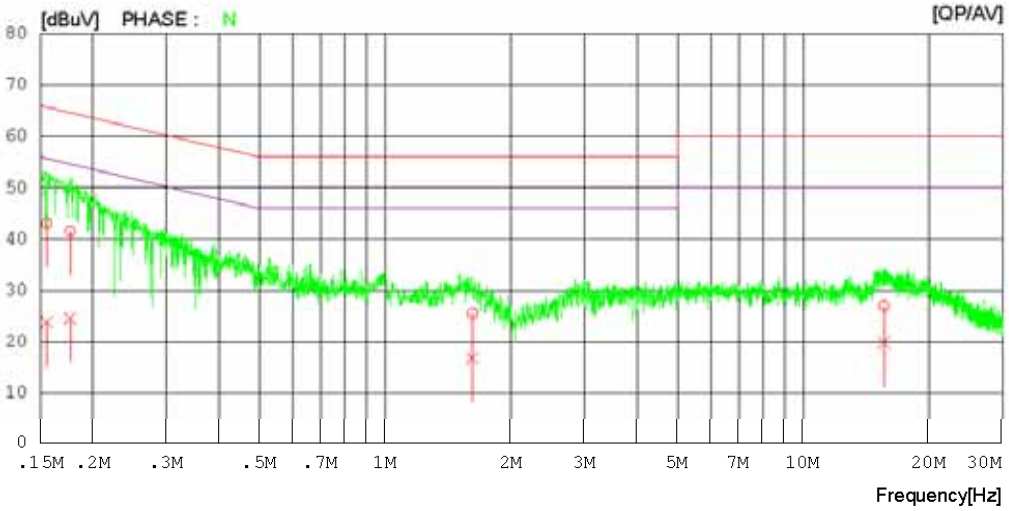
Results of Conducted Emission

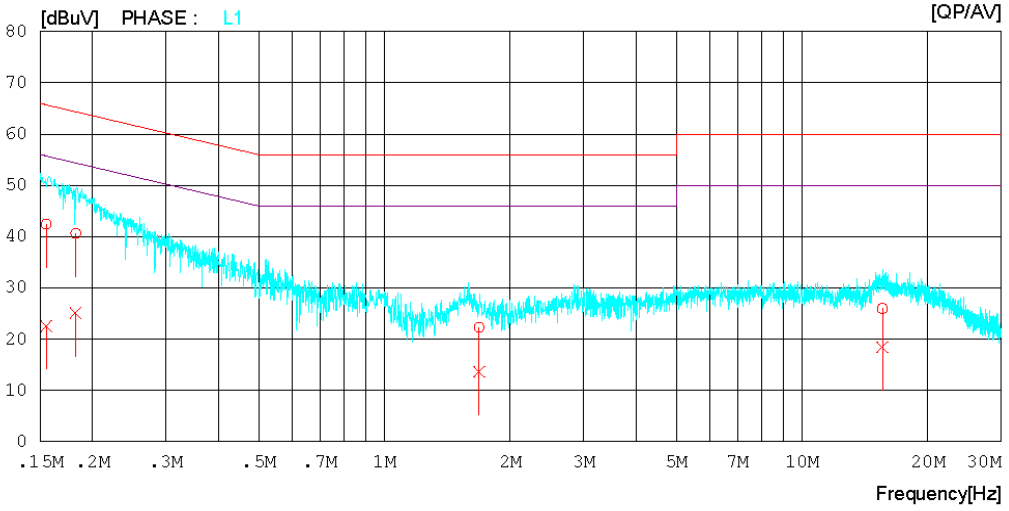
Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	DSUB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	DSUB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15503	42.9	23.7	0.1	43.0	23.8	65.7	55.7	22.7	31.9	N
2	0.17643	41.4	24.4	0.1	41.5	24.5	64.7	54.7	23.2	30.2	N
3	1.61550	25.4	16.6	0.2	25.6	16.8	56.0	46.0	30.4	29.2	N
4	15.57300	26.5	19.4	0.5	27.0	19.9	60.0	50.0	33.0	30.1	N
5	0.15503	42.3	22.5	0.1	42.4	22.6	65.7	55.7	23.3	33.1	L1
6	0.18225	40.5	25.0	0.1	40.6	25.1	64.4	54.4	23.8	29.3	L1
7	1.68350	22.1	13.4	0.2	22.3	13.6	56.0	46.0	33.7	32.4	L1
8	15.55900	25.5	18.0	0.5	26.0	18.5	60.0	50.0	34.0	31.5	L1

< HDMI MODE >

Digital EMC

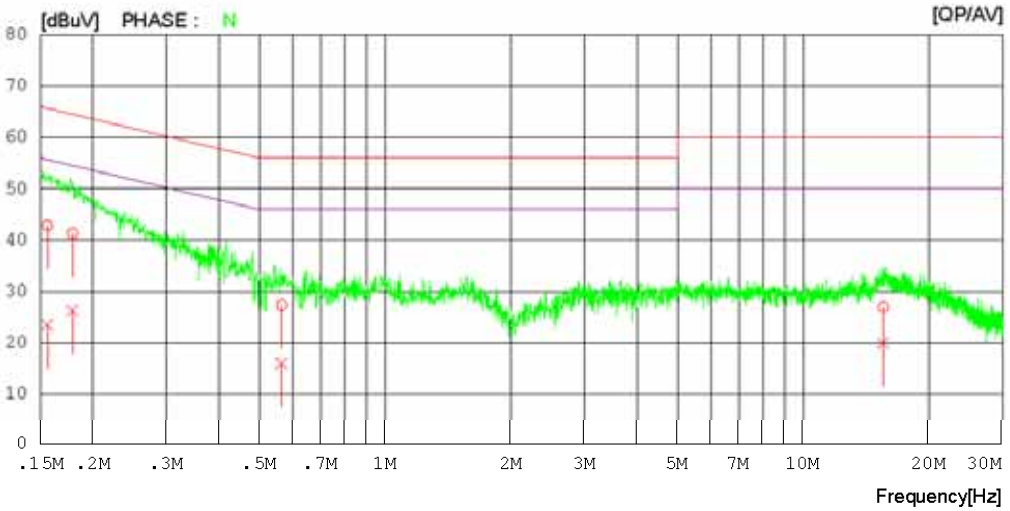
Results of Conducted Emission

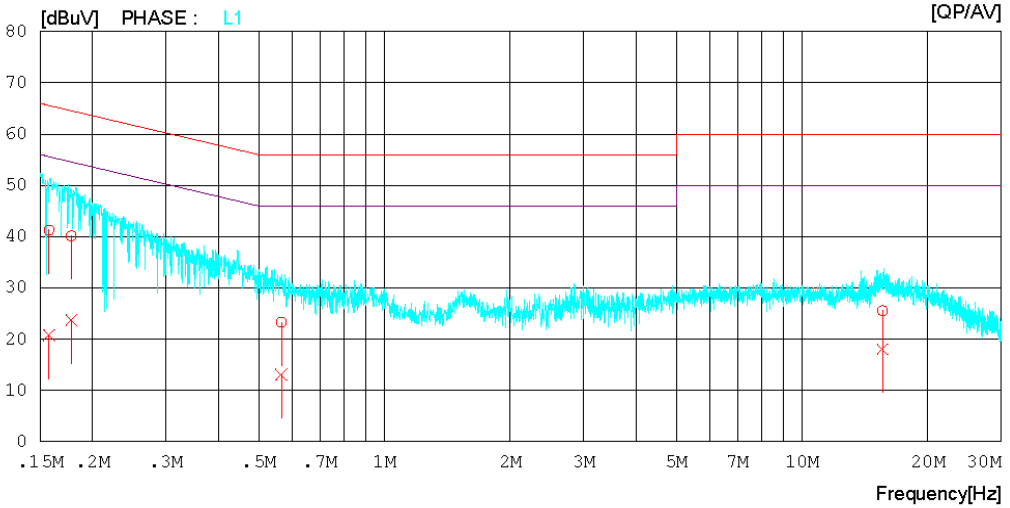
Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15585	42.7	23.4	0.1	42.8	23.5	65.7	55.7	22.9	32.2	N
2	0.17888	41.2	26.2	0.1	41.3	26.3	64.5	54.5	23.2	28.2	N
3	0.56495	27.2	15.8	0.1	27.3	15.9	56.0	46.0	28.7	30.1	N
4	15.50100	26.4	19.4	0.5	26.9	19.9	60.0	50.0	33.1	30.1	N
5	0.15719	41.2	20.7	0.1	41.3	20.8	65.6	55.6	24.3	34.8	L1
6	0.17783	40.0	23.6	0.1	40.1	23.7	64.6	54.6	24.5	30.9	L1
7	0.56611	23.2	13.0	0.1	23.3	13.1	56.0	46.0	32.7	32.9	L1
8	15.57050	25.1	17.6	0.5	25.6	18.1	60.0	50.0	34.4	31.9	L1

< SIDE HDMI MODE >

Digital EMC

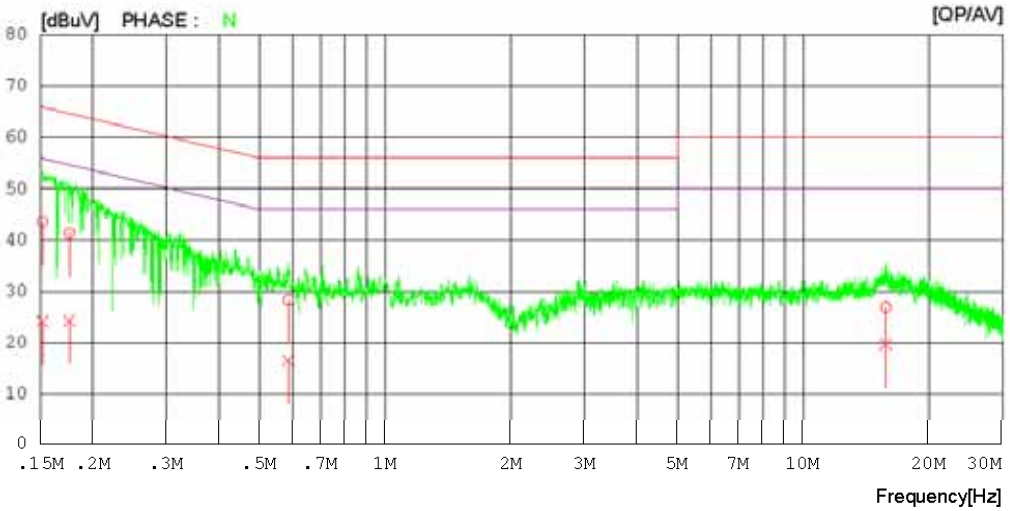
Results of Conducted Emission

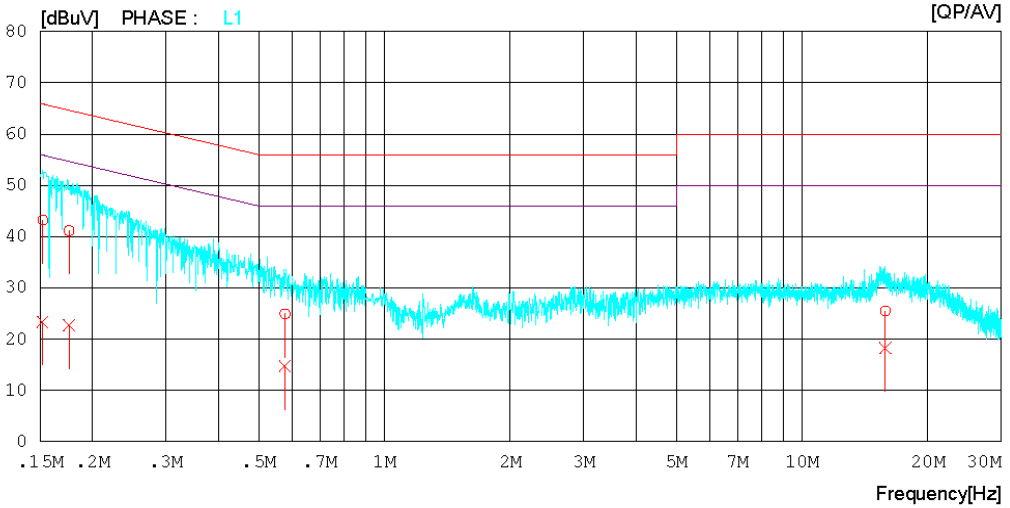
Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	SIDE HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	SIDE HDMI	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15150	43.4	24.0	0.1	43.5	24.1	65.9	55.9	22.4	31.8	N
2	0.17586	41.3	24.2	0.1	41.4	24.3	64.7	54.7	23.3	30.4	N
3	0.58650	28.2	16.4	0.1	28.3	16.5	56.0	46.0	27.7	29.5	N
4	15.72150	26.4	19.3	0.5	26.9	19.8	60.0	50.0	33.1	30.2	N
5	0.15185	43.1	23.3	0.1	43.2	23.4	65.9	55.9	22.7	32.5	L1
6	0.17563	41.1	22.6	0.1	41.2	22.7	64.7	54.7	23.5	32.0	L1
7	0.57761	24.8	14.6	0.1	24.9	14.7	56.0	46.0	31.1	31.3	L1
8	15.80650	25.0	17.8	0.5	25.5	18.3	60.0	50.0	34.5	31.7	L1

< USB MODE >

Digital EMC

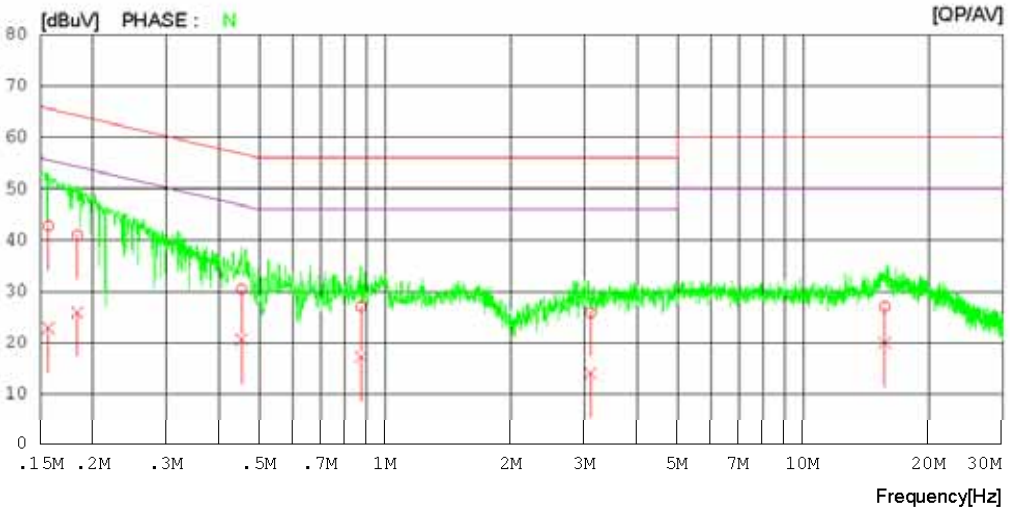
Results of Conducted Emission

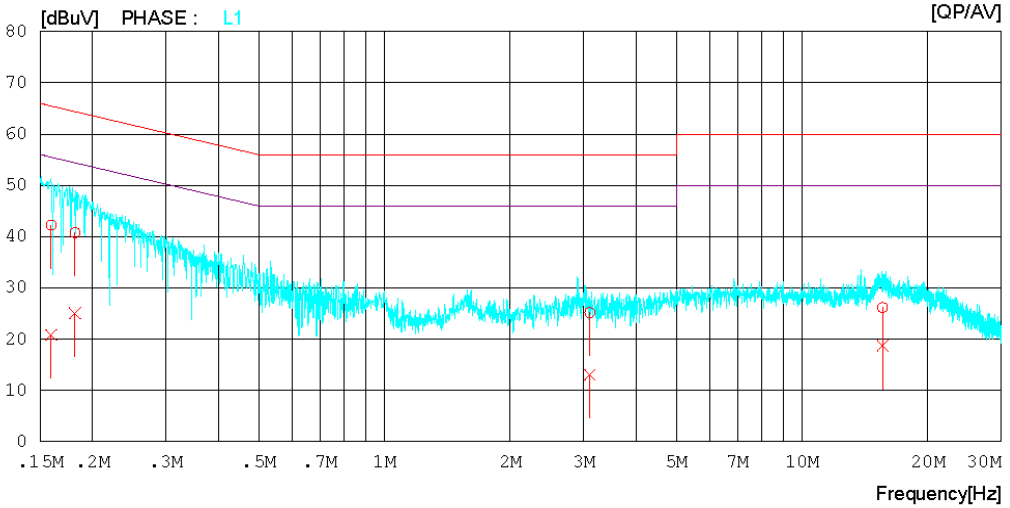
Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV





Results of Conducted Emission

Digital EMC
Date : 2011/05/02

Model No.	:	22LV255C-UA	Referrence No.	:	
Type	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi.	:	20 'C 38 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15650	42.7	22.8	0.1	42.8	22.9	65.6	55.6	22.8	32.7	N
2	0.18341	40.8	25.8	0.1	40.9	25.9	64.3	54.3	23.4	28.4	N
3	0.45311	30.2	20.6	0.1	30.3	20.7	56.8	46.8	26.5	26.1	N
4	0.87540	26.8	17.1	0.2	27.0	17.3	56.0	46.0	29.0	28.7	N
5	3.09850	25.7	13.9	0.2	25.9	14.1	56.0	46.0	30.1	31.9	N
6	15.64000	26.6	19.5	0.5	27.1	20.0	60.0	50.0	32.9	30.0	N
7	0.15906	42.1	20.8	0.1	42.2	20.9	65.5	55.5	23.3	34.6	L1
8	0.18150	40.7	25.0	0.1	40.8	25.1	64.4	54.4	23.6	29.3	L1
9	3.10050	25.0	12.9	0.2	25.2	13.1	56.0	46.0	30.8	32.9	L1
10	15.57000	25.7	18.2	0.5	26.2	18.7	60.0	50.0	33.8	31.3	L1

6.2 Radiated Emission

RESULT : COMPLY

6.2.1 Measurement Procedure

The radiated emission was measured and set-up was made accordance with **ANSI C63.4:2003.**
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 **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 List of Test and Measurement Instruments

Radiated Emission (10m Chamber)					
Name of Instrument	**Model No.**	**Serial No.**	**Manufacturer**	**Cal. Date**	**Next Cal. Date**
EMI Test Receiver	ESU	100014	R&S	2011.01.20	2012.01.20
Bilog Antenna	CBL6112B	2737	SCHAFFNER	2010.07.14	2012.07.14
Horn Antenna	BBHA9120A	322	SCHWARZBECK	2010.04.13	2012.04.13
Amplifier(22dB)	8447E	2945A02865	H/P	2011.01.11	2012.01.11
Low Noise Preamplifier	MLA-00108-B02-36	1518831	TSJ	2011.01.11	2012.01.11
Controller	5905A	N/A	TOKIN	-	-
ANT.master	N/A	N/A	TOKIN	-	-

6.2.3 Limit of Radiated Emission

- The test frequency range of Radiated Emission 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	5th 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 limits (dBμV/m)	Quasi-peak limits (dBμV/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.		
30 to 230	40	30
230 to 1000	47	37

(2) Limits for Radiated Emission in the frequency range 1000 - 2000MHz at a measuring distance of 10m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	peak (dBμV/m)	peak (dBμV/m)	peak (dBμV/m)	Average (dBμV/m)
1 to 2	69.5	49.5	63.5	43.5

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

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

6.2.4 Test Result

Test date	May 03, 2011
Ambient Temperature	18 ℃
Relative Humidity	40 % R.H.

Result : For the measurement data, see next page

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 >

- 30MHz-1GHz

Digital E.M.C

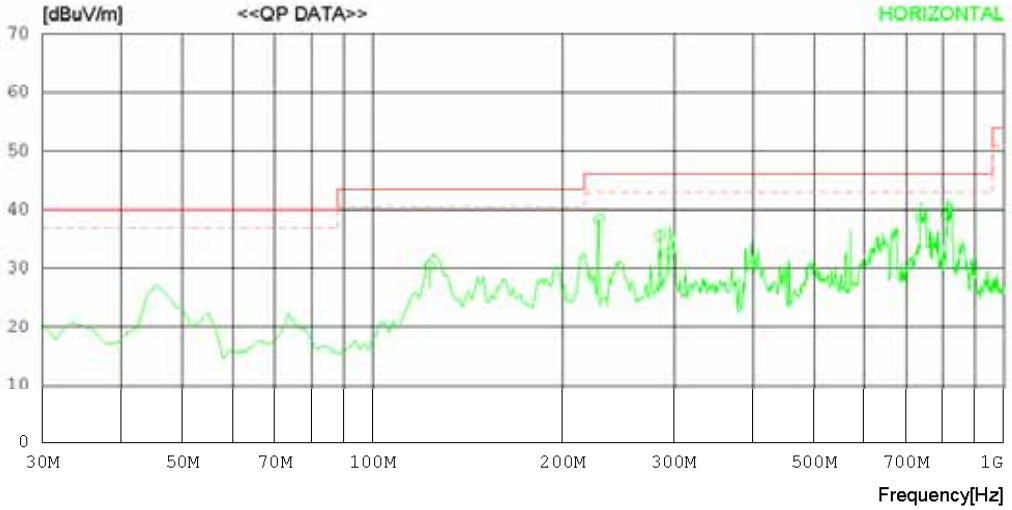
RADIATED EMISSION

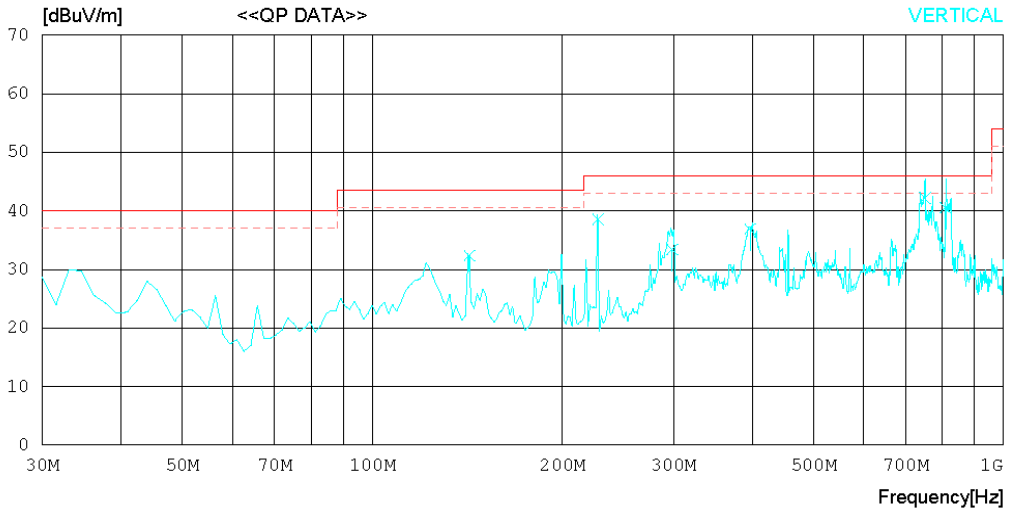
Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	DSUB	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2011-05-03

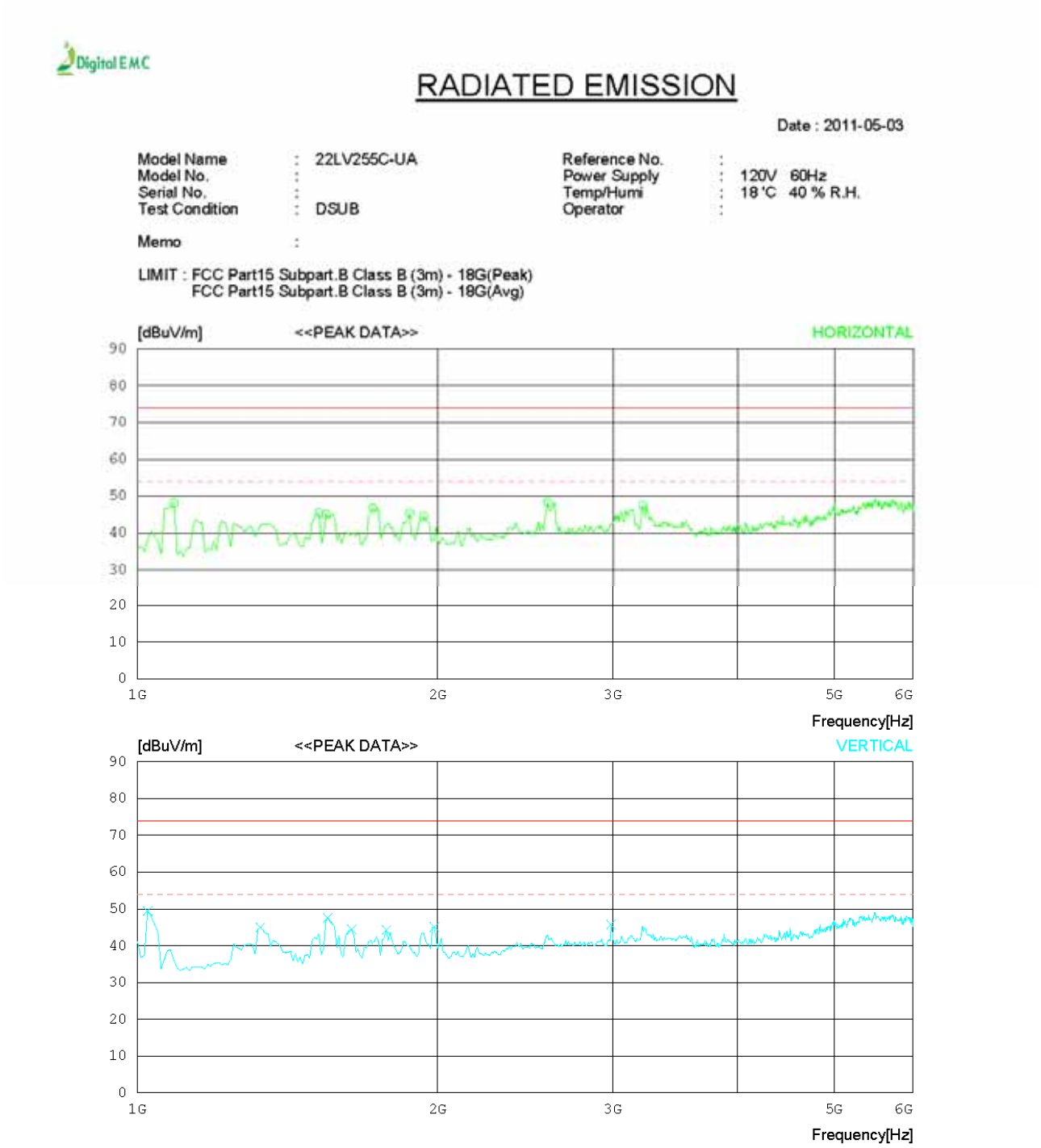
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	DSUB	Operator	:	

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	123.100	40.0	11.7	1.6	22.9	30.4	43.5	13.1	203	215
2	228.100	48.0	11.6	2.2	23.4	38.4	46.0	7.6	100	1
3	285.130	43.3	13.6	2.5	23.8	35.6	46.0	10.4	229	1
4	294.900	40.0	13.8	2.6	23.8	32.6	46.0	13.4	100	358
5	736.600	39.1	19.4	4.1	23.9	38.7	46.0	7.3	100	137
6	810.200	38.4	20.3	4.2	23.6	39.3	46.0	6.7	203	144
----- Vertical ------										
7	142.560	42.8	10.8	1.8	23.0	32.4	43.5	11.1	100	194
8	228.000	48.2	11.6	2.2	23.4	38.6	46.0	7.4	100	82
9	298.740	40.9	13.8	2.6	23.9	33.4	46.0	12.6	188	358
10	397.040	42.3	15.9	3.0	24.3	36.9	46.0	9.1	100	1
11	751.000	42.2	19.6	4.2	23.8	42.2	46.0	3.8	100	158
12	810.100	39.7	20.3	4.2	23.6	40.6	46.0	5.4	100	164

- 1GHz-6GHz_Peak



RADIATED EMISSION

Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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	1088.141	61.1	23.9	5.0	41.8	48.2	74.0	25.8	100	186
2	1520.833	56.3	25.1	6.0	41.9	45.5	74.0	28.5	100	195
3	1544.872	55.9	25.1	6.0	41.9	45.1	74.0	28.9	100	132
4	1721.154	57.0	25.2	6.4	41.9	46.7	74.0	27.3	100	358
5	1873.397	55.5	25.2	6.7	42.0	45.4	74.0	28.6	100	163
6	1937.500	54.4	25.2	6.9	42.0	44.5	74.0	29.5	100	358
7	2578.533	54.9	27.6	7.9	42.1	48.3	74.0	25.7	100	358
8	3211.555	51.4	29.0	9.0	42.0	47.4	74.0	26.6	100	192
----- Vertical ------										
9	1024.038	62.6	23.7	4.9	41.8	49.4	74.0	24.6	100	150
10	1328.526	56.7	24.6	5.6	41.9	45.0	74.0	29	100	150
11	1552.884	58.2	25.1	6.1	41.9	47.5	74.0	26.5	100	134
12	1641.025	54.9	25.2	6.2	41.9	44.4	74.0	29.6	100	1
13	1777.243	54.6	25.2	6.5	42.0	44.3	74.0	29.7	100	1
14	1985.577	54.9	25.2	7.0	42.0	45.1	74.0	28.9	100	342
15	2987.193	50.3	28.8	8.7	42.1	45.7	74.0	28.3	100	7

- 1GHz-6GHz_Average

Digital E.M.C

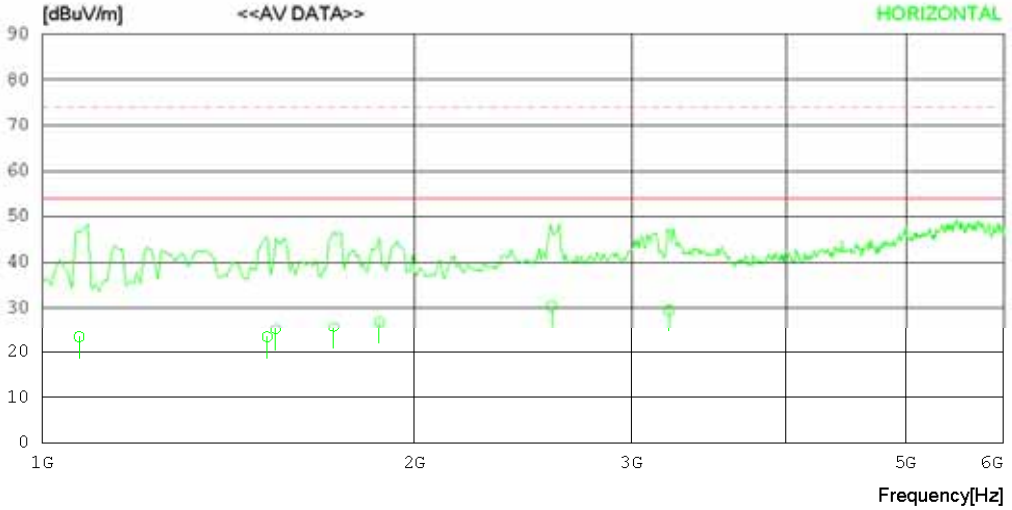
RADIATED EMISSION

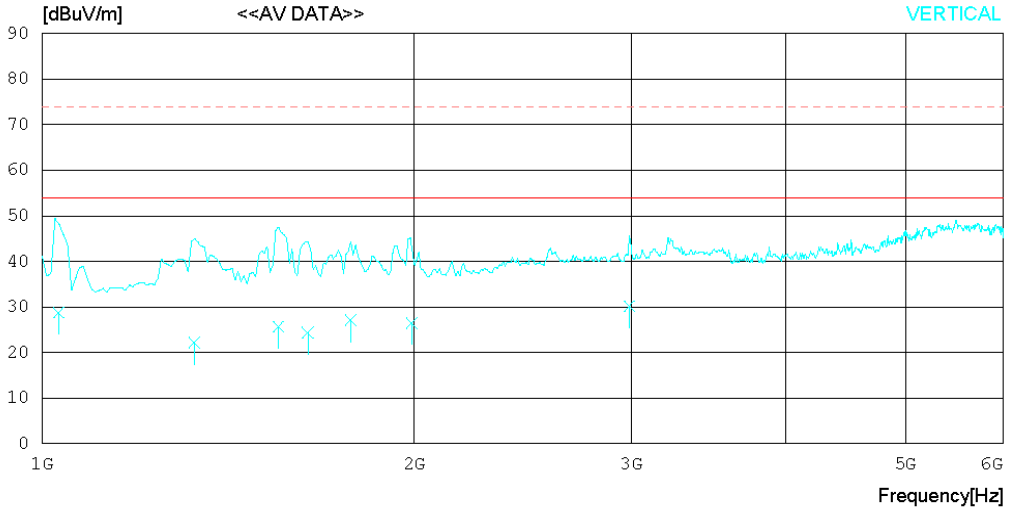
Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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 : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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	1071.000	36.3	23.8	5.0	41.8	23.3	54.0	30.7	100	186
2	1520.833	34.1	25.1	6.0	41.9	23.3	54.0	30.7	100	195
3	1544.872	35.9	25.1	6.0	41.9	25.1	54.0	28.9	100	132
4	1721.154	35.9	25.2	6.4	41.9	25.6	54.0	28.4	100	358
5	1873.397	36.9	25.2	6.7	42.0	26.8	54.0	27.2	100	163
6	2581.350	36.9	27.6	7.9	42.1	30.3	54.0	23.7	100	358
7	3211.555	33.4	29.0	9.0	42.0	29.4	54.0	24.6	100	192
----- Vertical ------										
8	1031.000	42.0	23.7	4.9	41.8	28.8	54.0	25.2	100	150
9	1328.526	33.9	24.6	5.6	41.9	22.2	54.0	31.8	100	150
10	1552.884	36.4	25.1	6.1	41.9	25.7	54.0	28.3	100	134
11	1641.025	34.9	25.2	6.2	41.9	24.4	54.0	29.6	100	1
12	1777.243	37.4	25.2	6.5	42.0	27.1	54.0	26.9	100	1
13	1991.500	36.3	25.2	7.0	42.0	26.5	54.0	27.5	100	342
14	2987.610	34.8	28.8	8.7	42.1	30.2	54.0	23.8	100	7

< HDMI MODE >

- 30MHz-1GHz

Digital EMC

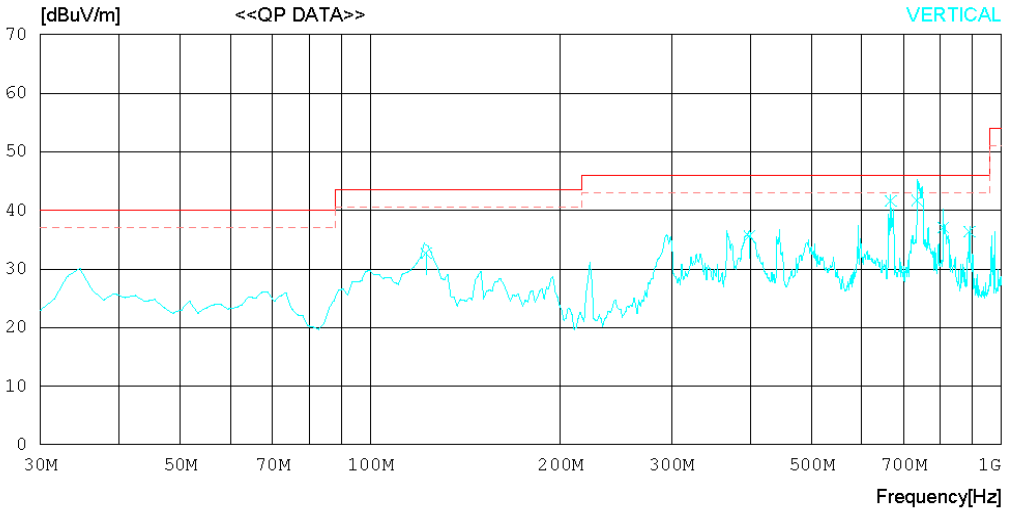
RADIATED EMISSION

Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	HDMI	Operator	:	

Memo :

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



RADIATED EMISSION

Date : 2011-05-03

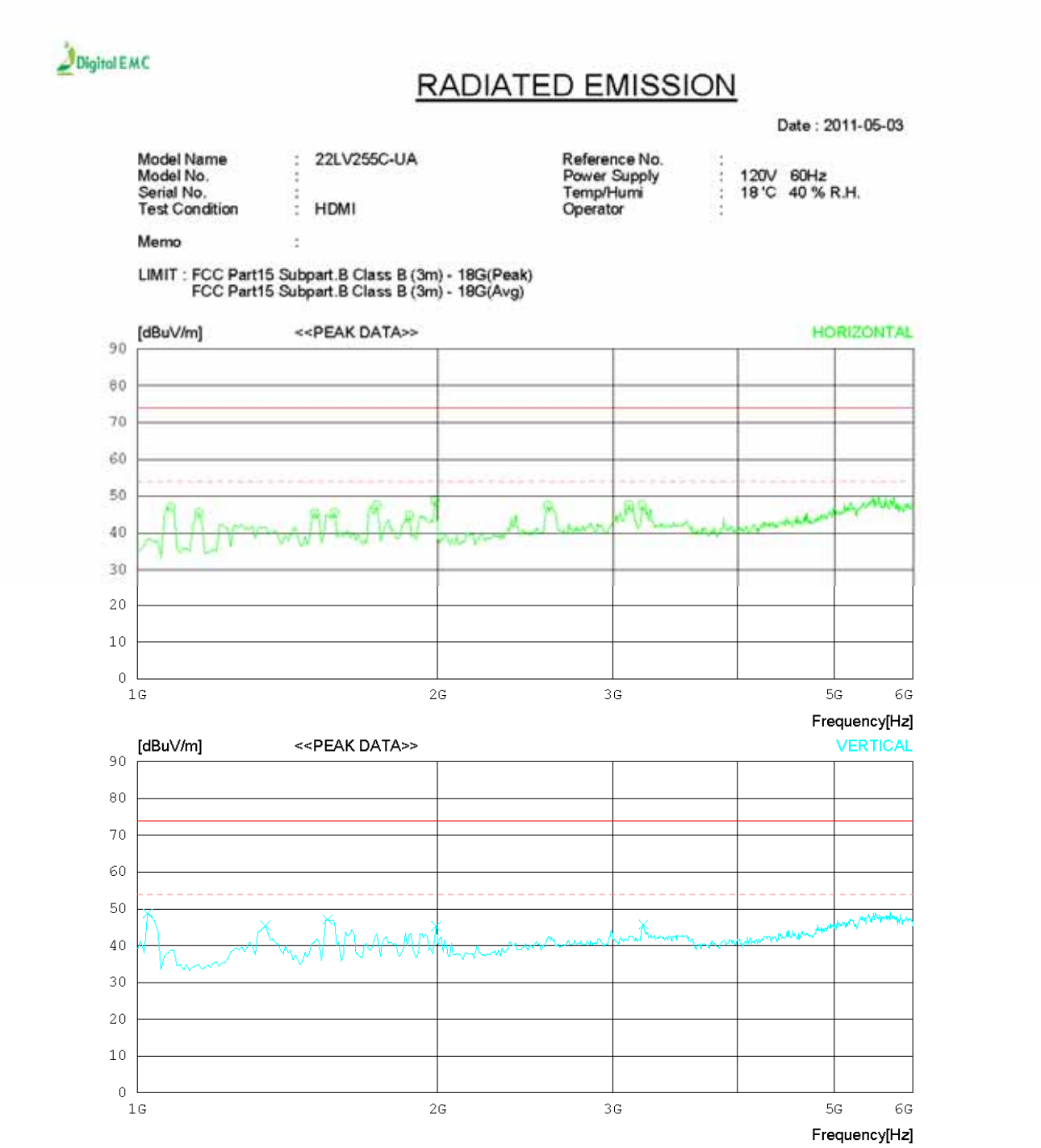
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	HDMI	Operator	:	

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	122.620	41.4	11.7	1.6	22.9	31.8	43.5	11.7	198	131
2	296.700	42.3	13.8	2.6	23.8	34.9	46.0	11.1	100	259
3	667.580	43.0	18.9	3.9	24.1	41.7	46.0	4.3	125	104
4	735.360	41.0	19.4	4.1	23.9	40.6	46.0	5.4	251	253
5	890.120	39.5	20.6	4.5	23.3	41.3	46.0	4.7	100	0
----- Vertical ------										
6	122.620	42.3	11.7	1.6	22.9	32.7	43.5	10.8	100	358
7	398.580	41.0	15.9	3.0	24.3	35.6	46.0	10.4	100	195
8	667.580	42.9	18.9	3.9	24.1	41.6	46.0	4.4	100	358
9	735.300	42.1	19.4	4.1	23.9	41.7	46.0	4.3	100	191
10	808.799	36.2	20.3	4.2	23.6	37.1	46.0	8.9	100	167
11	890.110	34.6	20.6	4.5	23.3	36.4	46.0	9.6	100	358

- 1GHz-6GHz_Peak



RADIATED EMISSION

Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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	1080.128	59.8	23.9	5.0	41.8	46.9	74.0	27.1	100	1
2	1152.244	58.0	24.1	5.2	41.8	45.5	74.0	28.5	100	184
3	1504.807	56.2	25.1	6.0	41.9	45.4	74.0	28.6	100	1
4	1576.923	56.2	25.1	6.1	41.9	45.5	74.0	28.5	100	198
5	1737.179	57.7	25.2	6.5	41.9	47.5	74.0	26.5	100	1
6	1873.397	54.9	25.2	6.7	42.0	44.8	74.0	29.2	100	166
7	1985.577	58.5	25.2	7.0	42.0	48.7	74.0	25.3	100	1
8	2578.533	54.0	27.6	7.9	42.1	47.4	74.0	26.6	100	196
9	3107.387	51.9	28.9	8.9	42.1	47.6	74.0	26.4	100	1
10	3203.542	51.6	28.9	9.0	42.0	47.5	74.0	26.5	100	1
----- Vertical ------										
11	1024.038	62.0	23.7	4.9	41.8	48.8	74.0	25.2	100	151
12	1344.551	57.1	24.7	5.6	41.9	45.5	74.0	28.5	100	161
13	1552.884	57.8	25.1	6.1	41.9	47.1	74.0	26.9	100	137
14	1993.589	55.1	25.2	7.0	42.0	45.3	74.0	28.7	100	10
15	3219.568	49.6	29.0	9.1	42.0	45.7	74.0	28.3	100	358

- 1GHz-6GHz_Average

Digital EMC

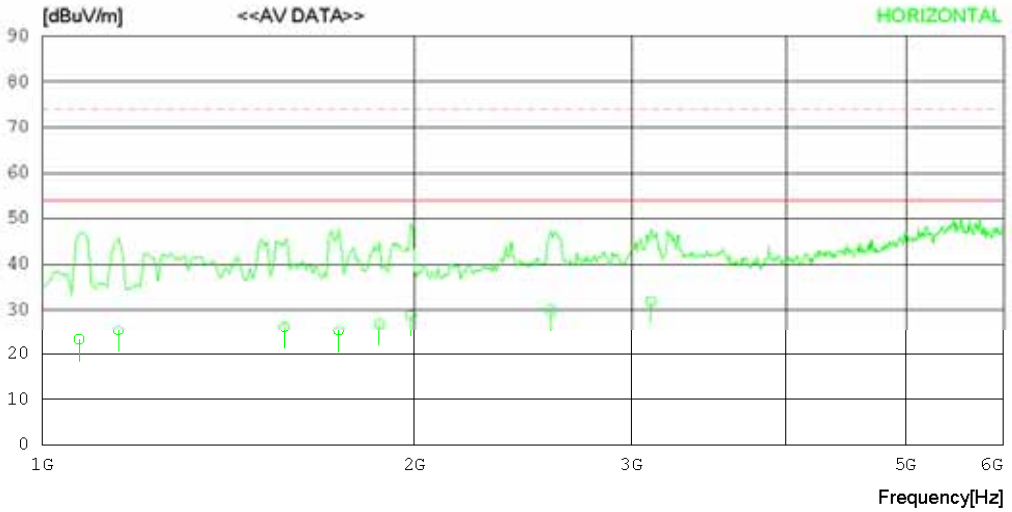
RADIATED EMISSION

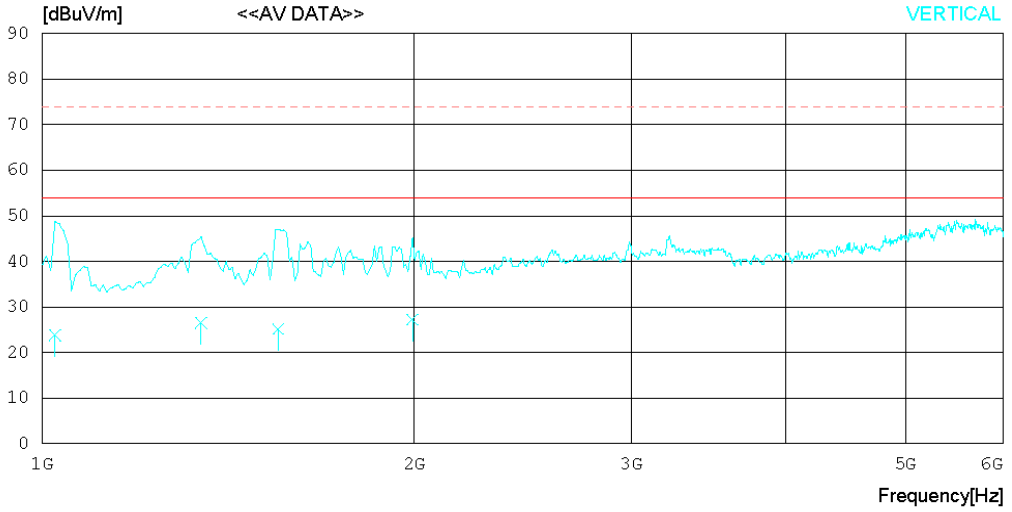
Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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 : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	HDMI	Operator	:	

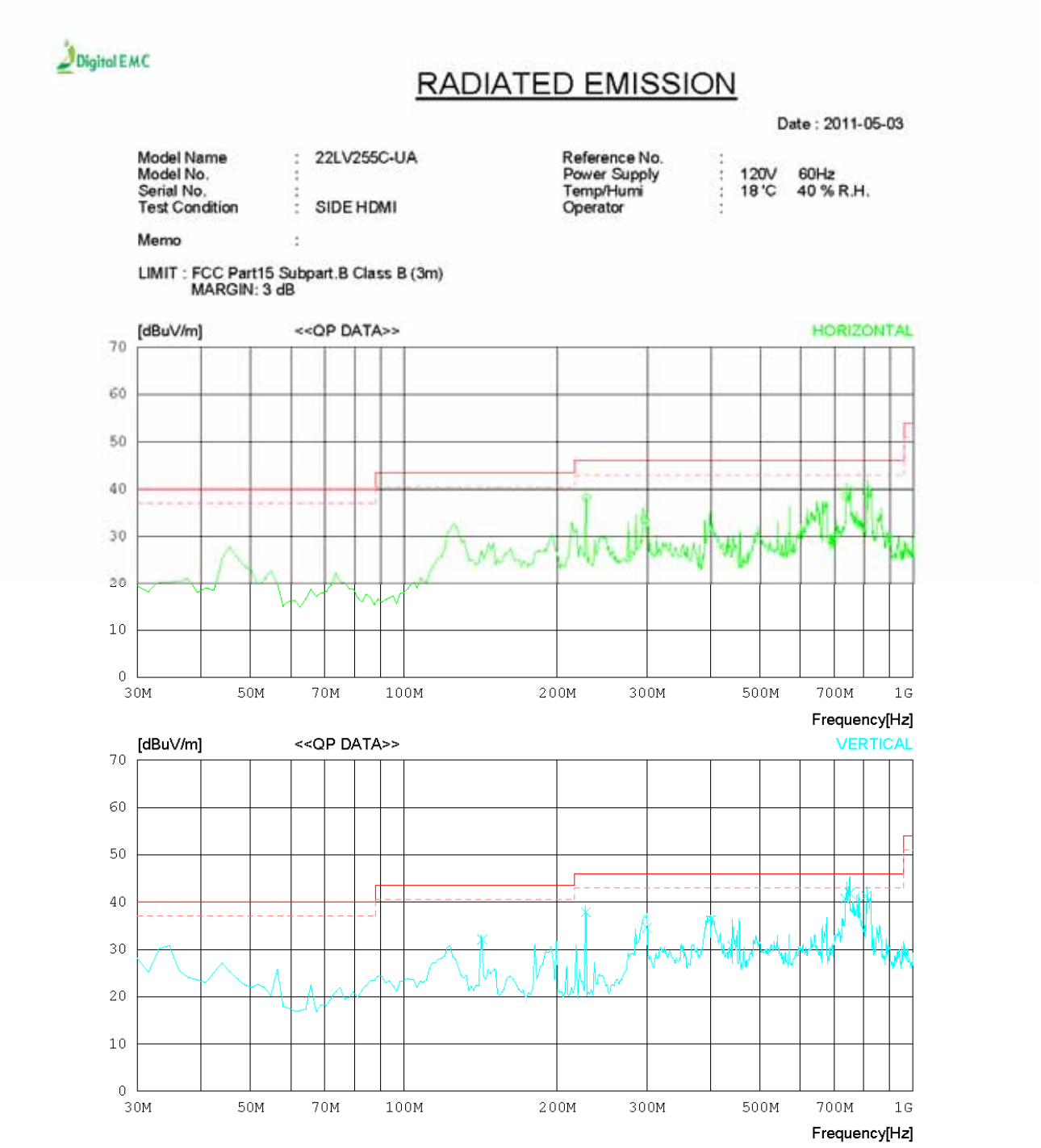
Memo :

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	1071.000	36.2	23.8	5.0	41.8	23.2	54.0	30.8	100	1
2	1152.244	37.8	24.1	5.2	41.8	25.3	54.0	28.7	100	184
3	1569.840	36.7	25.1	6.1	41.9	26.0	54.0	28.0	100	198
4	1737.179	35.4	25.2	6.5	41.9	25.2	54.0	28.8	100	1
5	1873.397	36.9	25.2	6.7	42.0	26.8	54.0	27.2	100	166
6	1985.577	38.6	25.2	7.0	42.0	28.8	54.0	25.2	100	1
7	2578.533	36.4	27.6	7.9	42.1	29.8	54.0	24.2	100	196
8	3107.387	36.1	28.9	8.9	42.1	31.8	54.0	22.2	100	1
----- Vertical ------										
9	1024.038	37.0	23.7	4.9	41.8	23.8	54.0	30.2	100	151
10	1344.551	38.1	24.7	5.6	41.9	26.5	54.0	27.5	100	161
11	1552.884	35.9	25.1	6.1	41.9	25.2	54.0	28.8	100	137
12	1993.589	37.1	25.2	7.0	42.0	27.3	54.0	26.7	100	10

< SIDE HDMI MODE >

- 30MHz-1GHz



RADIATED EMISSION

Date : 2011-05-03

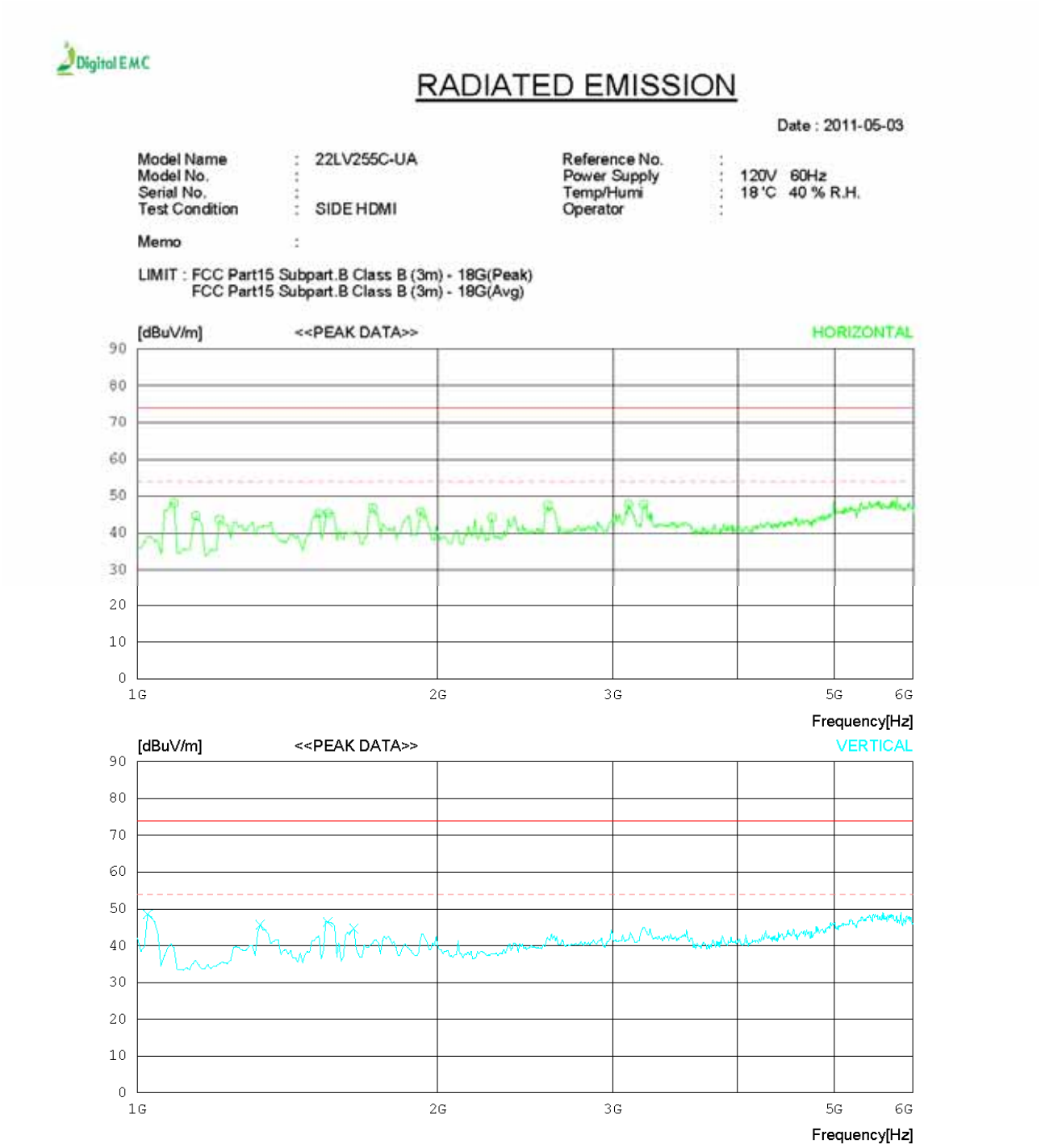
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	SIDE HDMI	Operator	:	

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	228.100	47.8	11.6	2.2	23.4	38.2	46.0	7.8	201	358
2	296.450	41.0	13.8	2.6	23.8	33.6	46.0	12.4	400	0
3	736.550	38.9	19.4	4.1	23.9	38.5	46.0	7.5	201	0
4	810.800	38.3	20.3	4.2	23.6	39.2	46.0	6.8	301	359
----- Vertical ------										
5	142.550	42.5	10.8	1.8	23.0	32.1	43.5	11.4	100	207
6	228.100	47.5	11.6	2.2	23.4	37.9	46.0	8.1	100	87
7	300.600	42.0	13.9	2.6	23.9	34.6	46.0	11.4	100	171
8	399.967	41.5	16.0	3.0	24.3	36.2	46.0	9.8	100	358
9	441.400	35.4	16.7	3.2	24.5	30.8	46.0	15.2	100	185
10	736.600	41.1	19.4	4.1	23.9	40.7	46.0	5.3	100	358
11	751.283	41.9	19.6	4.2	23.8	41.9	46.0	4.1	100	163
12	810.200	40.4	20.3	4.2	23.6	41.3	46.0	4.7	100	358

- 1GHz-6GHz_Peak



RADIATED EMISSION

Date : 2011-05-03

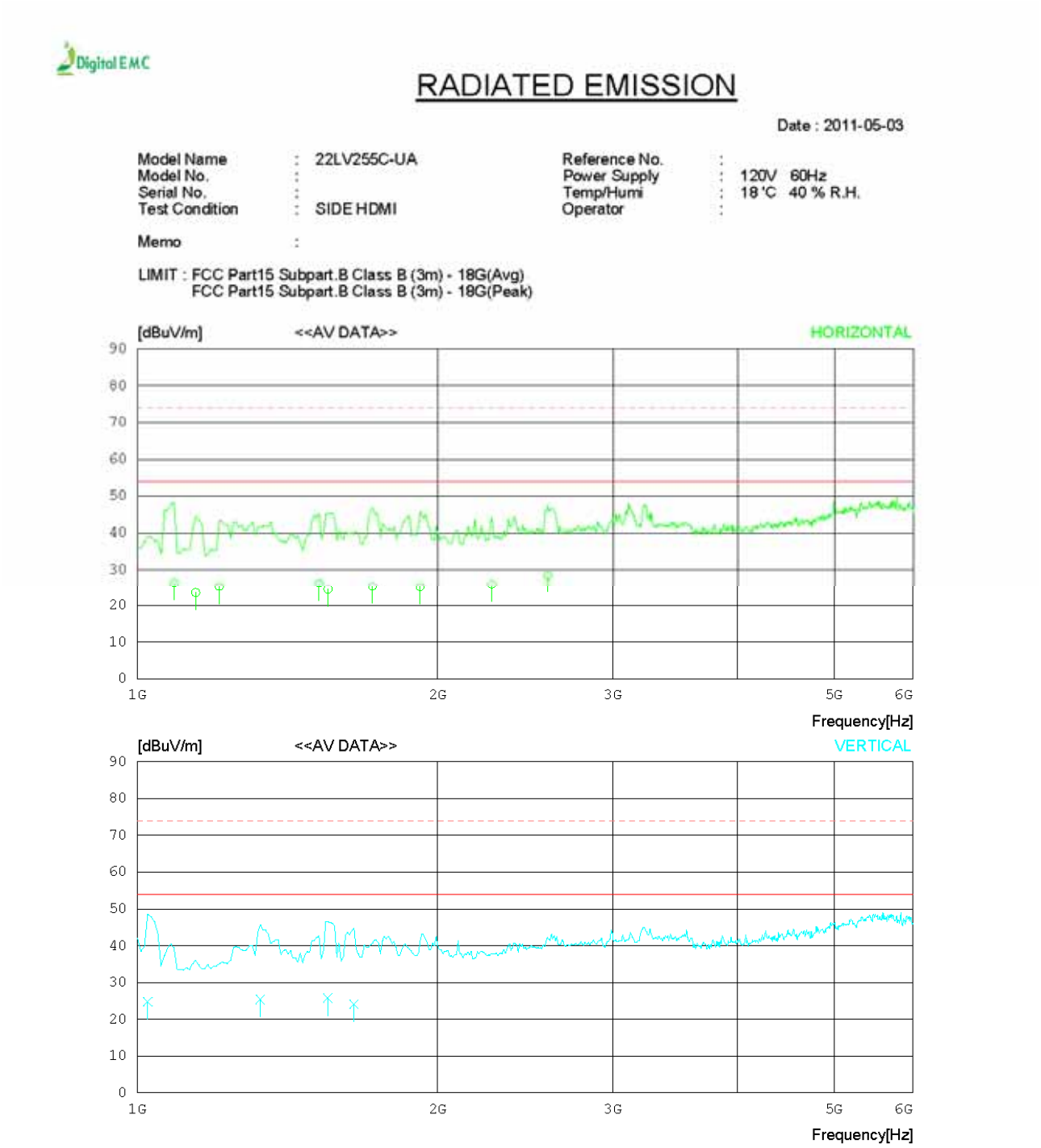
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	SIDE HDMI	Operator	:	

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	1088.141	61.1	23.9	5.0	41.8	48.2	74.0	25.8	100	1
2	1144.231	57.3	24.1	5.1	41.8	44.7	74.0	29.3	100	1
3	1208.333	55.8	24.3	5.3	41.8	43.6	74.0	30.4	100	143
4	1520.833	56.2	25.1	6.0	41.9	45.4	74.0	28.6	100	199
5	1552.884	56.1	25.1	6.1	41.9	45.4	74.0	28.6	100	199
6	1721.154	57.1	25.2	6.4	41.9	46.8	74.0	27.2	100	159
7	1921.474	55.8	25.2	6.8	42.0	45.8	74.0	28.2	100	230
8	2266.029	52.5	26.3	7.4	42.0	44.2	74.0	29.8	100	7
9	2578.533	54.1	27.6	7.9	42.1	47.5	74.0	26.5	100	1
10	3107.387	52.1	28.9	8.9	42.1	47.8	74.0	26.2	100	1
11	3219.568	51.6	29.0	9.1	42.0	47.7	74.0	26.3	100	195
----- Vertical ------										
12	1024.038	61.8	23.7	4.9	41.8	48.6	74.0	25.4	100	183
13	1328.526	57.4	24.6	5.6	41.9	45.7	74.0	28.3	100	169
14	1552.884	57.2	25.1	6.1	41.9	46.5	74.0	27.5	100	358
15	1649.038	55.1	25.2	6.3	41.9	44.7	74.0	29.3	100	177

- 1GHz-6GHz_Average



RADIATED EMISSION

Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	SIDE 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	1088.141	39.1	23.9	5.0	41.8	26.2	54.0	27.8	100	1
2	1144.231	36.1	24.1	5.1	41.8	23.5	54.0	30.5	100	1
3	1208.333	37.4	24.3	5.3	41.8	25.2	54.0	28.8	100	143
4	1520.841	36.9	25.1	6.0	41.9	26.1	54.0	27.9	100	199
5	1552.884	35.1	25.1	6.1	41.9	24.4	54.0	29.6	100	199
6	1721.154	35.6	25.2	6.4	41.9	25.3	54.0	28.7	100	159
7	1921.474	35.1	25.2	6.8	42.0	25.1	54.0	28.9	100	230
8	2266.029	34.1	26.3	7.4	42.0	25.8	54.0	28.2	100	7
9	2578.533	35.0	27.6	7.9	42.1	28.4	54.0	25.6	100	1
----- Vertical ------										
10	1024.038	38.0	23.7	4.9	41.8	24.8	54.0	29.2	100	183
11	1328.526	37.1	24.6	5.6	41.9	25.4	54.0	28.6	100	169
12	1552.884	36.5	25.1	6.1	41.9	25.8	54.0	28.2	100	358
13	1649.038	34.5	25.2	6.3	41.9	24.1	54.0	29.9	100	177

< USB MODE >

- 30MHz-1GHz

Digital EMC

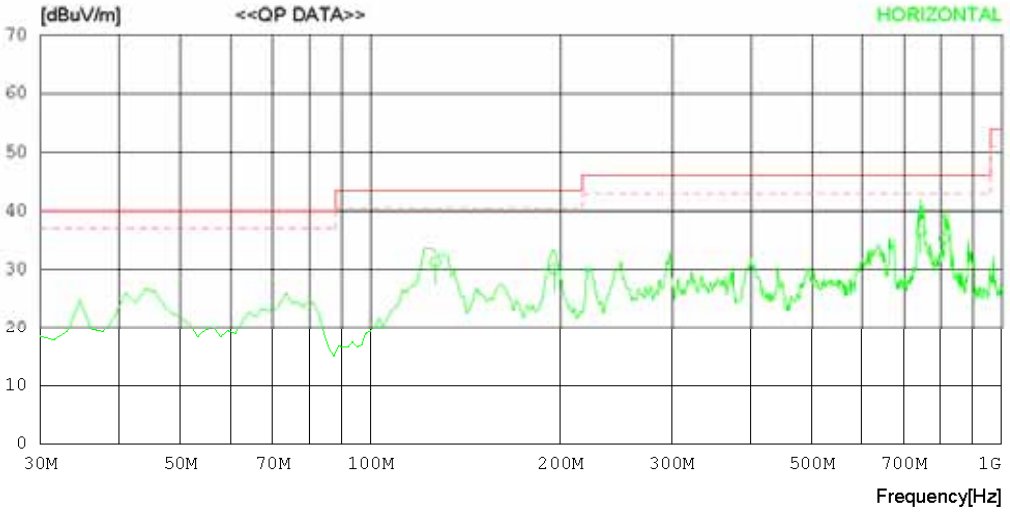
RADIATED EMISSION

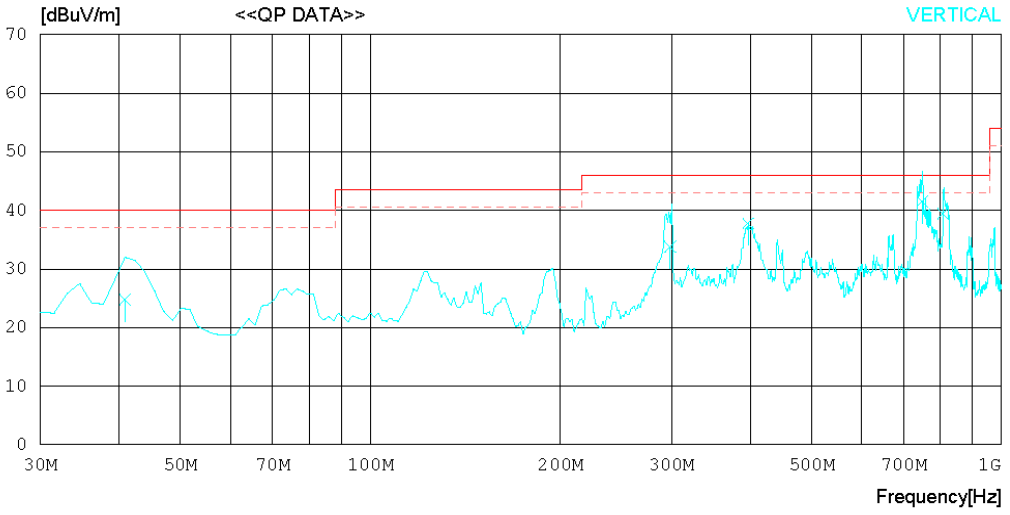
Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	USB	Operator	:	

Memo :

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





RADIATED EMISSION

Date : 2011-05-03

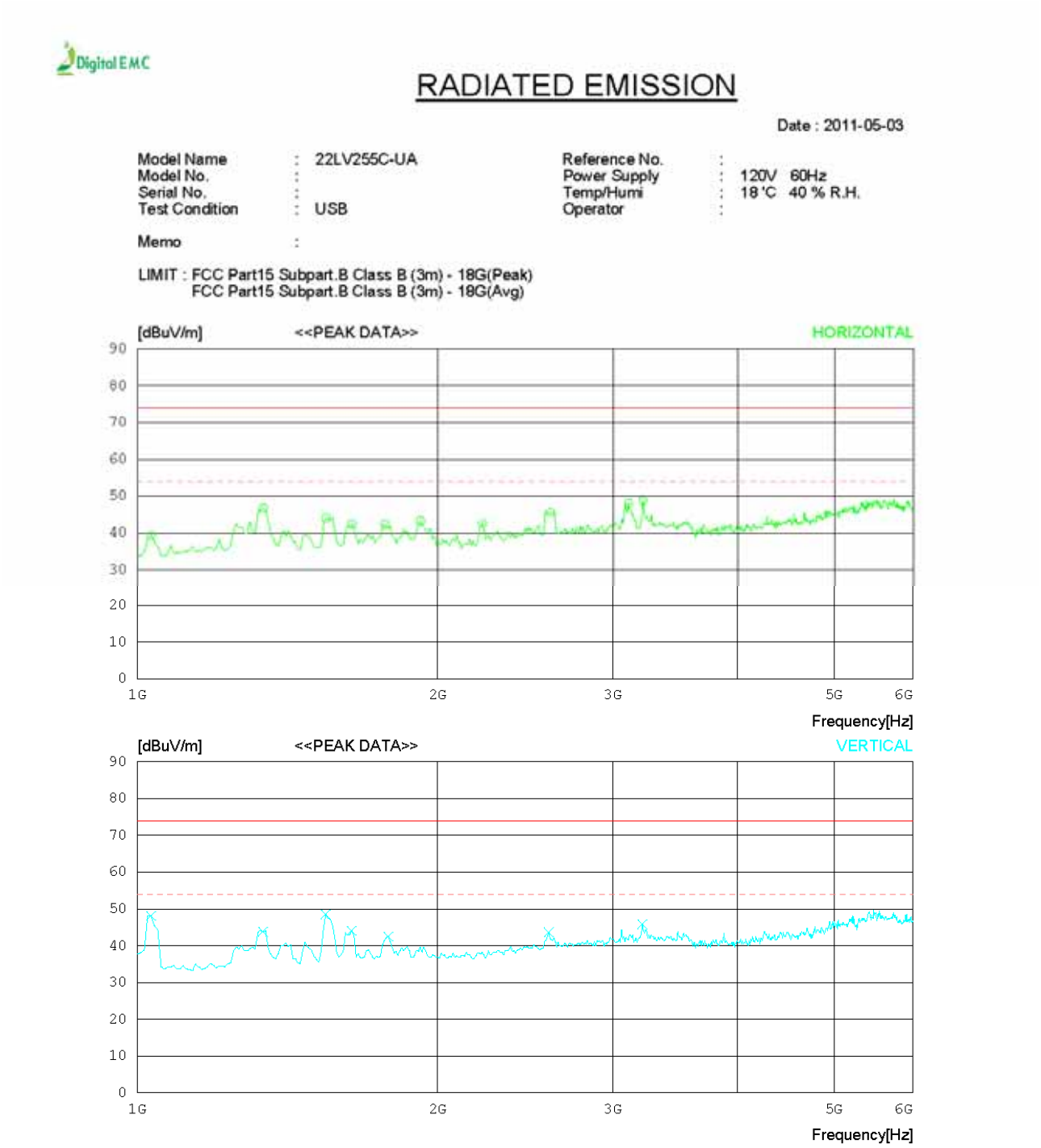
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	USB	Operator	:	

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	126.500	40.8	11.7	1.7	22.9	31.3	43.5	12.2	226	175
2	195.050	41.5	9.7	2.1	23.2	30.1	43.5	13.4	100	358
3	741.956	36.8	19.5	4.1	23.9	36.5	46.0	9.5	100	186
4	808.799	34.4	20.3	4.2	23.6	35.3	46.0	10.7	201	149
----- Vertical ------										
5	40.881	32.6	13.9	0.9	22.6	24.8	40.0	15.2	100	167
6	298.750	41.3	13.8	2.6	23.9	33.8	46.0	12.2	146	358
7	396.858	43.2	15.9	3.0	24.3	37.8	46.0	8.2	176	1
8	749.690	41.6	19.6	4.2	23.9	41.5	46.0	4.5	100	169
9	808.800	38.5	20.3	4.2	23.6	39.4	46.0	6.6	199	161

- 1GHz-6GHz_Peak



RADIATED EMISSION

Date : 2011-05-03

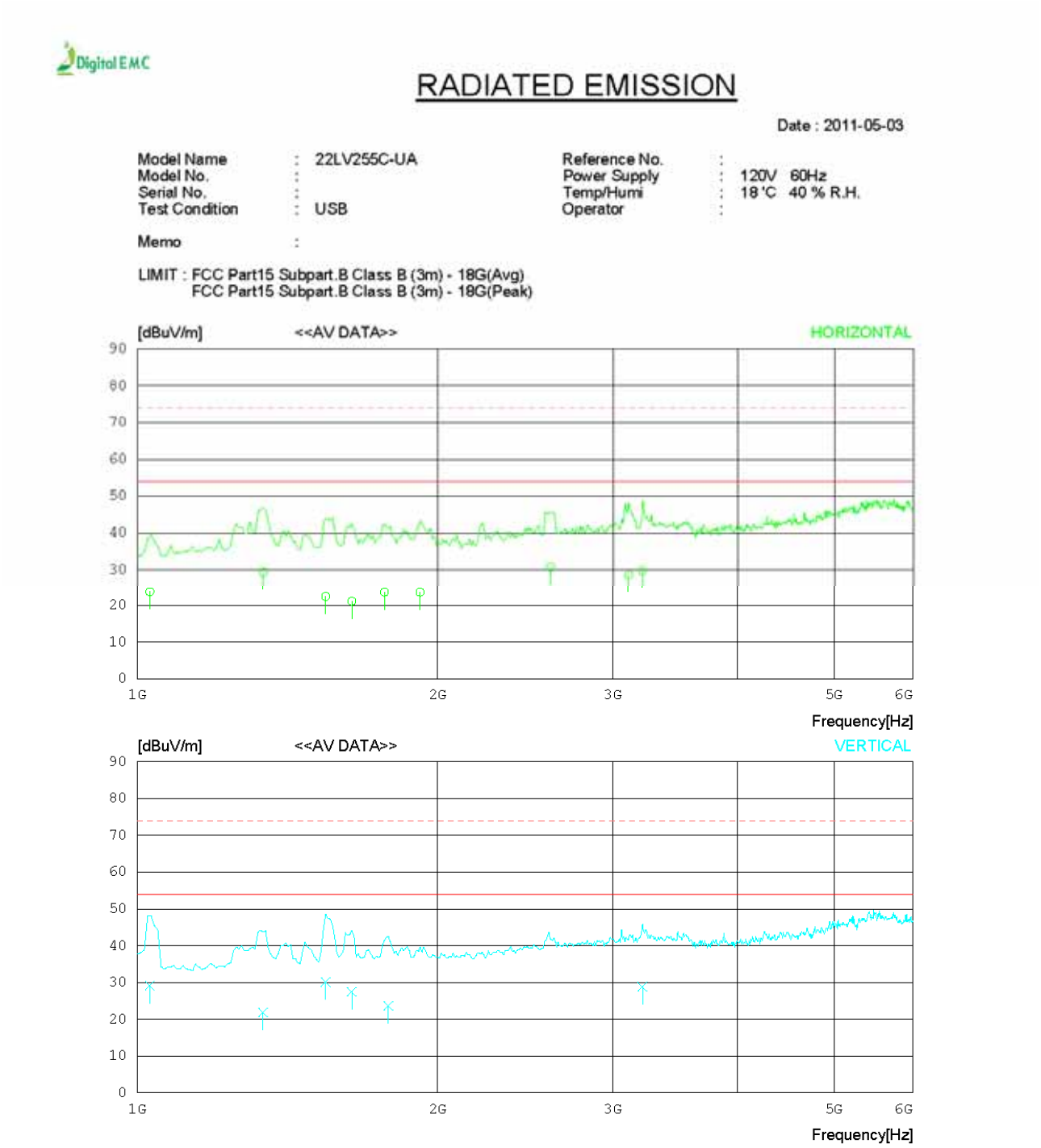
Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % R.H.
Test Condition	:	USB	Operator	:	

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	1032.051	52.6	23.7	4.9	41.8	39.4	74.0	34.6	100	1
2	1336.538	58.4	24.6	5.6	41.9	46.7	74.0	27.3	100	126
3	1544.872	54.8	25.1	6.0	41.9	44.0	74.0	30	100	1
4	1641.025	52.9	25.2	6.2	41.9	42.4	74.0	31.6	100	142
5	1769.230	52.7	25.2	6.5	42.0	42.4	74.0	31.6	100	166
6	1921.474	53.3	25.2	6.8	42.0	43.3	74.0	30.7	100	1
7	2217.951	51.2	26.1	7.3	42.0	42.6	74.0	31.4	100	142
8	2594.559	52.2	27.6	7.9	42.1	45.6	74.0	28.4	100	179
9	3107.387	52.3	28.9	8.9	42.1	48.0	74.0	26	100	179
10	3211.555	52.7	29.0	9.0	42.0	48.7	74.0	25.3	100	1
----- Vertical ------										
11	1032.051	61.3	23.7	4.9	41.8	48.1	74.0	25.9	100	151
12	1336.538	55.5	24.6	5.6	41.9	43.8	74.0	30.2	100	169
13	1544.872	59.3	25.1	6.0	41.9	48.5	74.0	25.5	100	358
14	1641.025	54.6	25.2	6.2	41.9	44.1	74.0	29.9	100	358
15	1785.256	52.7	25.2	6.6	42.0	42.5	74.0	31.5	100	358
16	2586.546	50.3	27.6	7.9	42.1	43.7	74.0	30.3	100	358
17	3211.555	49.8	29.0	9.0	42.0	45.8	74.0	28.2	100	205

- 1GHz-6GHz_Average



RADIATED EMISSION

Date : 2011-05-03

Model Name	:	22LV255C-UA	Reference No.	:	
Model No.	:		Power Supply	:	120V 60Hz
Serial No.	:		Temp/Humi	:	18 'C 40 % 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	1029.204	36.9	23.7	4.9	41.8	23.7	54.0	30.3	100	1
2	1336.538	40.9	24.6	5.6	41.9	29.2	54.0	24.8	100	126
3	1544.872	33.2	25.1	6.0	41.9	22.4	54.0	31.6	100	1
4	1641.025	31.6	25.2	6.2	41.9	21.1	54.0	32.9	100	142
5	1769.230	33.9	25.2	6.5	42.0	23.6	54.0	30.4	100	166
6	1921.474	33.6	25.2	6.8	42.0	23.6	54.0	30.4	100	1
7	2594.559	37.3	27.6	7.9	42.1	30.7	54.0	23.3	100	179
8	3107.387	32.8	28.9	8.9	42.1	28.5	54.0	25.5	100	179
9	3207.000	33.8	28.9	9.0	42.0	29.7	54.0	24.3	100	1
----- Vertical ------										
10	1029.205	42.3	23.7	4.9	41.8	29.1	54.0	24.9	100	151
11	1336.538	33.6	24.6	5.6	41.9	21.9	54.0	32.1	100	169
12	1544.872	40.9	25.1	6.0	41.9	30.1	54.0	23.9	100	358
13	1641.025	38.0	25.2	6.2	41.9	27.5	54.0	26.5	100	358
14	1785.256	33.9	25.2	6.6	42.0	23.7	54.0	30.3	100	358
15	3211.555	32.9	29.0	9.0	42.0	28.9	54.0	25.1	100	205