



Underwriters Laboratories Inc.

www.ul.com/emc

www.ulk.co.kr

Project: 12CA45851

File: MC16222

Report: 12CA45851-A2-FCC

Date: Dec. 18, 2012

Model: AMM215MWTD

Electromagnetic Compatibility Test Report

For

LCD Color Medical Monitor

**ADVAN INT'L CORP
47817 Fremont Blvd., Fremont, CA 94538 U.S.A.**

Copyright © 2005 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce this Report provided it is reproduced in its entirety.

Only those products bearing the UL Mark should be considered as being covered by UL.

Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page

2 of 29

Summary of Test Results:

The following tests were performed on a sample submitted for evaluation of compliance 47 CFR Part 15.107 (a) / 47 CFR Part 15.109 (a) Class B.				
Test #	Test Name Test Requirement/Specification	Compliant	Not Compliant	See Remark
1	AC Power line Conducted Emission Test	X	-	-
2	Radiated Emission Test	X	-	-
*Note: No modifications were made to the EUT in order to achieve and maintain compliance to the standards described in this report.				

Conclusion:

The tests listed in the Summary of Testing section of this report have been performed as a witness testing and the results recorded by UL Korea Ltd. in accordance with the procedures stated in each test requirement and specification. The test list was determined by the Applicant as being applicable to the Equipment Under Test. As a result, the subject product has been verified to comply or not comply as noted in the Summary of Testing with each test specification. The test results relate only to the items tested.

The equipment under test has

- ☐ Met the technical requirements
☒ Met the technical requirements under the limited condition
☐ Not met the technical requirements



Witnessed by
Hongsuk Oh, WiSE Associate Project Engineer
UL Verification Services – 3014ASEO
UL Korea Ltd.
Dec. 18, 2012



Reviewed by
Sung Hoon Baek, WiSE Senior Project Engineer
UL Verification Services – 3014ASEO
UL Korea Ltd.
Dec. 18, 2012

Project Number: 12CA45851 File Number MC16222 Page 3 of 29
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

Test Report Details

Test report No: 12CA45851-A2-FCC
File No: MC16222
Witnessed By: UL Korea Ltd.
33rd FL. GFC Bldg. 737 Yeoksam-dong, Kangnam-ku, Seoul, 135-984, Korea
Test Site: Digital EMC Co., Ltd
683-3, Yuban-Dong, Cheoin-Gu, Yongin-Si, Kyunggi-Do, 449-080, Korea
The test facility was deemed to have the environment and capabilities necessary to perform the tests included in the test package.
Applicant: ADVAN INT'L CORP
47817 Fremont Blvd., Fremont, CA 94538 U.S.A.
Manufacturer: ADVAN INT'L CORP
47817 Fremont Blvd., Fremont, CA 94538 U.S.A.
Factory: D&T Inc.
(JANG-DONG, (DAEDEOK VALLEY))
26-121 GAJEONGBUK-RO, YUSEONG-GU, DAEJEON 305-343, KOREA
Applicant Contact: Jun Ho Jang
Phone: 82-70-7842-8018
E-mail: andyjang@advancorp.com
Product Type: LCD COLOR MEDICAL MONITOR
Model Number: AMM215MWTD
Multi-listing model number: N/A
The manufacturer has declared to all the multiple model names into the basic model without any further evaluation by UL.
FCC ID: QVXAMM215MWTD
Trademark: N/A
Product standards: FCC Part 15 Subpart B
Test Procedure: ANSI C63.4 : 2003
Sample Serial Number: N/A
Sample Receive Date: Nov. 6, 2012
Testing Start Date: Nov. 7, 2012
Date Testing Complete: Dec. 7, 2012

Overall Results: Pass

UL Korea Ltd. reports apply only to the specific samples tested under stated test conditions. All samples tested were in good operating condition throughout the entire test program. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. UL Korea Ltd. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from UL Korea Ltd. issued reports.

REPORT DIRECTORY

1. GENERAL PRODUCT DESCRIPTION:	5
1.1 REPORT REVISION HISTORY:	5
1.2 EQUIPMENT DESCRIPTION:	5
1.3 DETAILS OF EQUIPMENT UNDER TEST (EUT):	5
1.4 TECHNICAL DATA:	6
1.5 EUT INTERNAL OPERATING FREQUENCY:	7
1.6 TECHNICAL DESCRIPTIONS AND DOCUMENTS:	7
1.7 DETAIL INFORMATION OF MULTI-LISTING MODEL:	7
1.8 EQUIPMENT MARKING PLATE OF PRODUCT:	8
2. TEST CONDITION:	9
2.1 EQUIPMENT USED DURING TEST:	9
2.2 INPUT/OUTPUT PORTS:	10
2.3 POWER INTERFACE:	10
2.4 TEST OPERATING MODE:	10
2.5 MODES OF VIDEO RESOLUTION:	11
2.6 USED D.C. EXTENSION CABLE FOR TEST:	11
2.7 TEST CONFIGURATION:	12
2.8 RESULT OF TESTING:	12
3. TEST CONDITION AND RESULTS:	13
3.1 MAINS TERMINAL DISTURBANCE VOLTAGE TEST:	13
3.2 RADIATED DISTURBANCE:	18

Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page

5 of 29

1. GENERAL PRODUCT DESCRIPTION

1.1 Report Revision History:

Revision Date	Description	Remarks
-	Original	-

1.2 Equipment Description:

Description:
Auto - Scanning with digital control LCD color medical monitor

1.3 Details of Equipment Under Test (EUT):

Equipment Configuration:				
No.	Product Type	Manufacturer	Model	Comments
1	LCD Color Medical Monitor	ADVAN Int'l Corp.	AMM215MWTD	-
2	AC/DC Adapter	Bridge power	JMW1100KB1300F02	1 EA
3	DC Extension Cable	-	1501047002	5 ft
4	DC Extension Cable	-	1501047	15 ft
5	DC Extension Cable	-	1501047001	75 ft
6	DVI-D cable	-	-	1 EA
7	HD15 VGA cable	-	-	1 EA
8	Hospital-grade AC power cord	-	-	1 EA
9	Composite Video BNC Jack Cable	-	-	1 EA
10	Super Video Cable	-	-	1 EA

Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page

6 of 29

1.4 Technical Data:

Model	AMM215MWTD
LCD Panel	
Diagonal	21.46 inches a-Si TFT Active Matrix
Resolution	1920 (H) x 1080 (V) @ 60Hz
Pixel Pitch	0.2475 mm
Display Color	16.7M colors
Viewing Angle	R/L 178°, U/D 178° (CR > 10)
Brightness**	250 cd/m ² (typ)
Efficient Picture Size	495.6 (H) x 292.2 (V) x 10.2 (D) mm
Input	
VGA	15pin D-Sub x 1 R/G/B : 0.7 Vp-p H/V Sync : TTL Level (V high ≥2.3V, V low ≤0.5V)
DVI	DVI-I x 1 TMDS Single Link
Optional DVI	DVI-I x 1 TMDS Single Link
Remote Input	9-pin D-Sub (RS-232C) x 1
Audio	Stereo Phone Jack x 1 Speaker Out : 1W x 2 EA
General	
Power Adaptor	AC Input : AC 100 ~ 240V 50-60Hz, 2.0A DC Output : DC 13V, 6.92A
Power Consumption	TBD
Dimension	523 (W) x 321 (H) x 110 (D) mm
Weight	Monitor : TBD AC adaptor : 680g

Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page 7 of 29

1.5 EUT Internal Operating Frequency

Frequency (MHz)	Description	Frequency (MHz)	Description
192.38 MHz	Memory Clock	27.000 MHz	System Clock
142 MHz	Display Clock	28.322 MHz	System Clock

1.6 Technical descriptions and documents:

No.	Document Title and Description
1	AMM215MWTD User Manual
*Note: The manufacturer provided the following document.	

1.7 Detail information of Multi-listing model:

-	Model	Description	Comment
1	-	-	-
*Note: The manufacturer has declared to all the multiple model names into the basic model without any further evaluation by UL.			

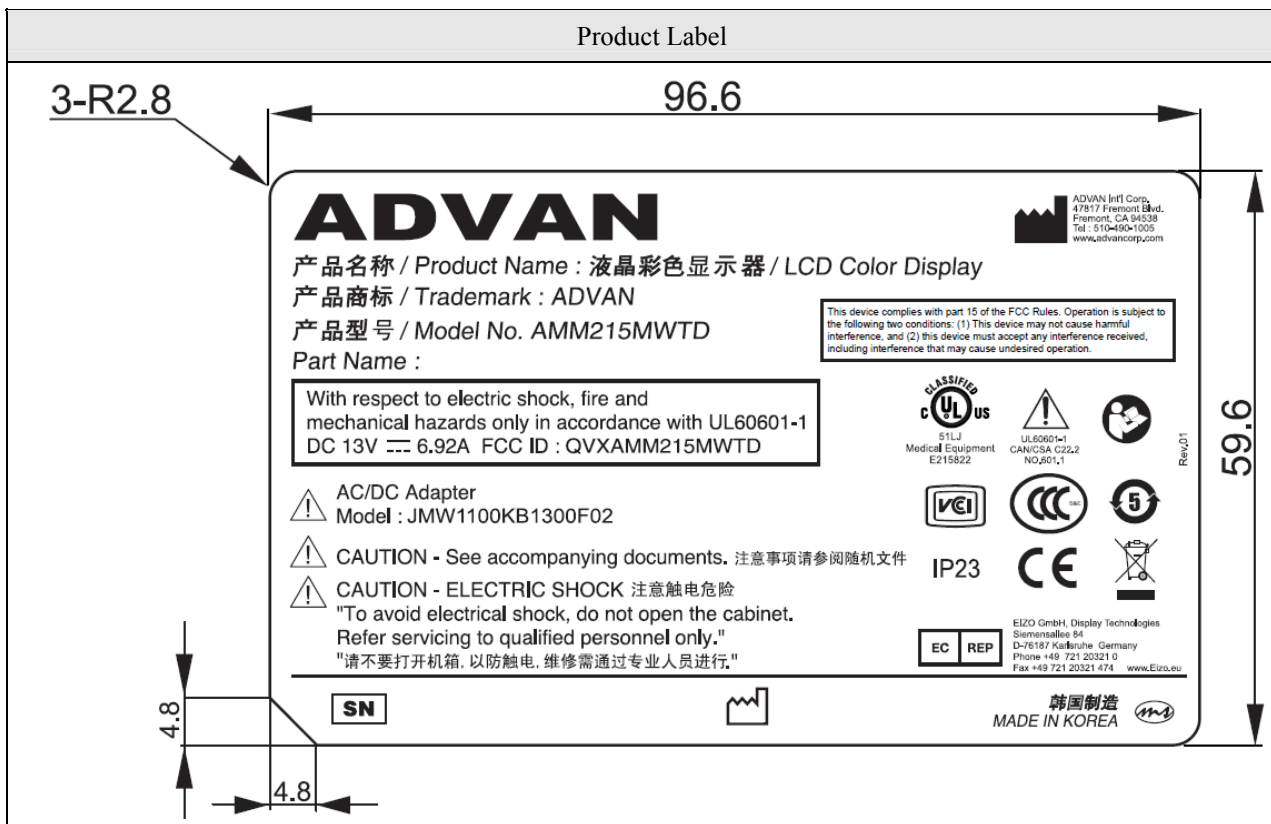
Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page

8 of 29

1.8 Equipment Marking Plate of Product:



Project Number: 12CA45851
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

File Number MC16222

Page

9 of 29

2. TEST CONDITION

2.1 Equipment Used During Test:

Use*	Product Type	Manufacturer	Model	Comments
EUT	LCD Color Medical Monitor	ADVAN Int'l Corp.	AMM215MWTD-Touch	-
EUT	AC/DC Adapter	Bridge power	JMW1100KB1300F02	-
EUT	DC Extension Cable	-	1501047002	5 ft
EUT	DC Extension Cable	-	1501047	15 ft
EUT	DC Extension Cable	-	1501047001	75 ft
AE	PC	DELL	VOSTRO430	
AE	Keyboard	MONITEREY INTERNATIONAL CORP.	SKG-210PB	
AE	Mouse	DELL	MS111-2	
AE	Headset 1	Cosy	N/ACOV903	
AE	Headset 2	Cresyn	CS-HP700	
* Note: EUT - Equipment Under Test, AE - Auxiliary/Associated Equipment, SIM - Simulator (Not Subjected to Test)				

2.2 Input/Output Ports:

Port #	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
1	A.C. input port	AC	1.8	Non shielded	A.C. Power Cord
2	USB input port	I/O	1.8	Shielded	USB Data cable
3	VGA In	I/O	1.8	Shielded	15 pin D-Sub
4	DVI In	I/O	1.8	Shielded	-
5	DVI In or Optical	I/O	1.8	Shielded	Optical Input mode was not tested by applicant re
6	RS-232C	-	-	-	Not user port
7	Audio-IN	I/O	1.2	Non shielded	Connected with Headset
Note: *AC= AC Power Port, DC = DC Power Port, N/E = Non-Electrical, I/O= Signal Input or Output Port (Not Involved in Process Control), TP= Telecommunication Ports, * RS-232 port is used for service purpose only. No user interface port.					

2.3 Power Interface:

Mode #	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Comments
Rated	AC 100-240 V	2 A	-	50-60Hz	Rated of Power Supply
1	AC 120 V	-	-	60Hz	-

2.4 Test Operating Mode:

Mode #	Mode	Comments
1	DVI Mode	Worst case condition
2	Optical Input mode	-
3	VGA Mode	Worst case condition
4	Touch Mode	Before and after immunity test, Touch function was checked
* Note: EUT have been performed under continuous displaying "H" Patten for configuration Modes of 1 to 2.		

2.5 Modes of Video Resolution:

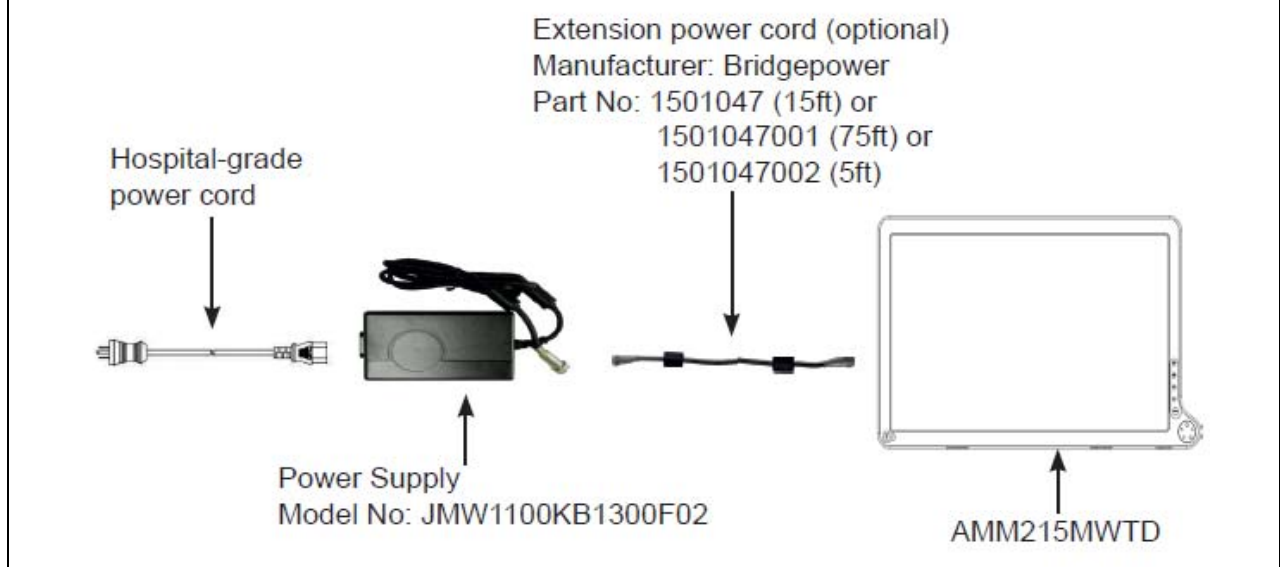
Mode #	Resolution	Comments
1	VGA Mode	640 x 350 @70Hz
2		1024 x 768 @75Hz
3		1920 x 1080@60Hz Worst case condition (Range of Brightness: 100, Range of contrast: 100 And range of backlight: 100.
4	DVI Mode	640 x 350 @70Hz
5		1024 x 768 @75Hz
6		1920 x 1080@60Hz Worst case condition (Range of Brightness: 100, Range of contrast: 100 And range of backlight: 100.

* **Note:** Video resolution where it refers from above is representative worst case.

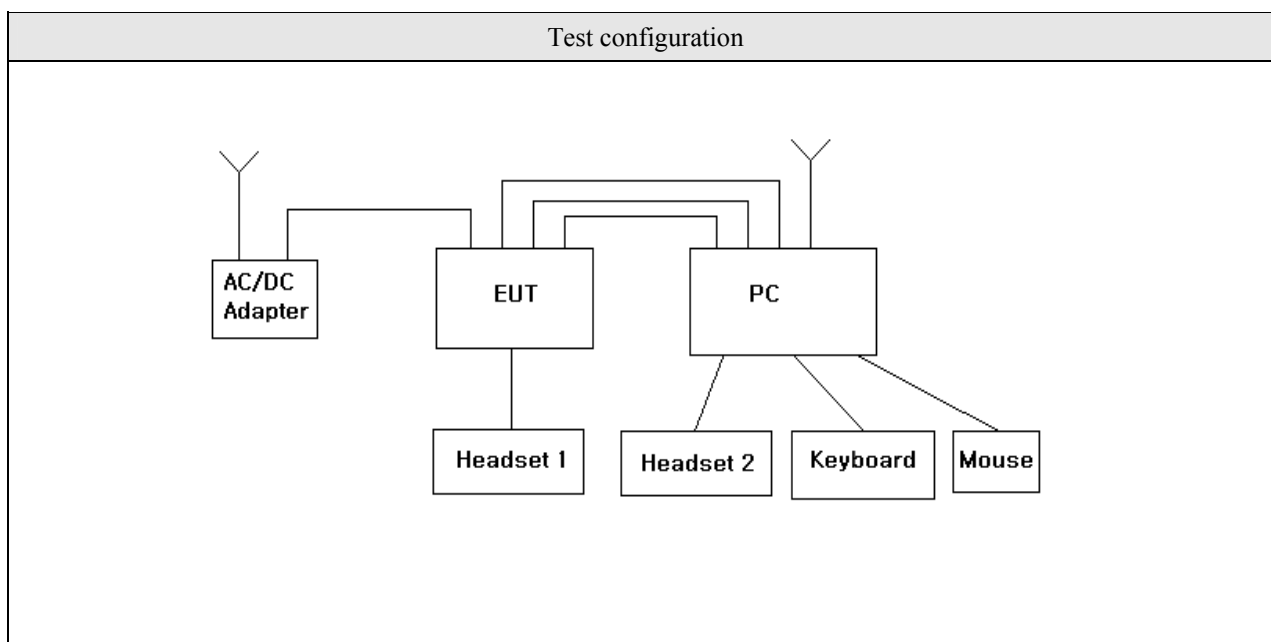
2.6 Used D.C. Extension Cable for Test:

No.	Cable Length	Preliminary Test	Comment
1	5ft	DVI, VGA and Optical Mode.	-
2	15ft		-
3	75ft		Worst case condition

* **Note:** Radiated emission and conducted emission test were performed for all extension power cable during the preliminary testing and selected worst-case condition (75ft) for final measurements.



2.7 Test Configuration:



2.8 Result of Testing:

No	Test requirements	Standard	Results	Verdict
1	AC Power line Conducted Emission Test	47 CFR Part 15.107(a) / 47 CFR Part 15.109(a) Class B	Met limit Class B	Complied
2	Radiated Emission Test		Met limit Class B	Complied

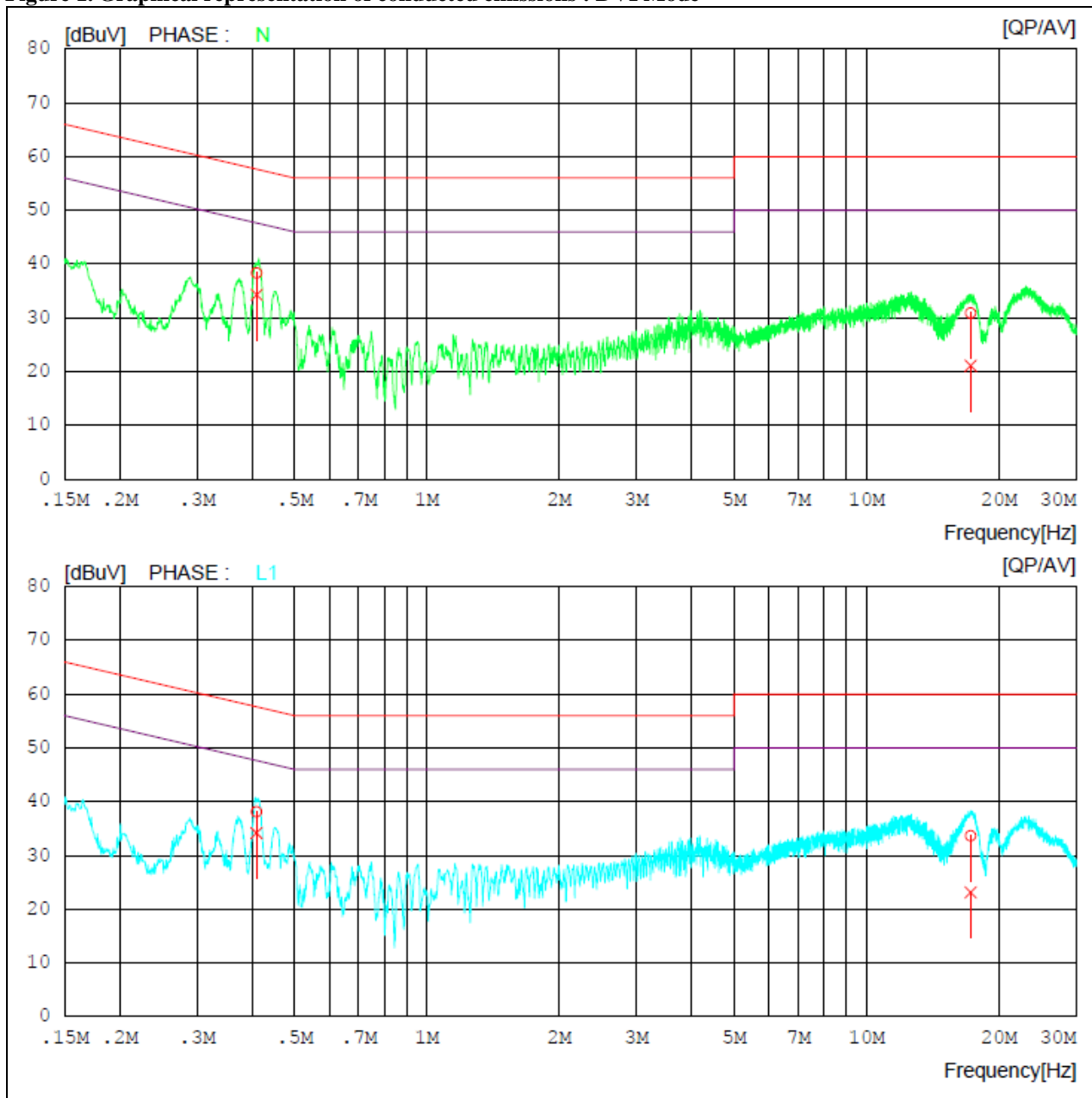
* **Note:** This product has been tested in accordance with the measurement procedures specified 47 CFR Part 15.107 (a) / 47 CFR Part 15.109 (a) Class B at the Digital EMC Laboratory and the test results has been shown to be complied with the EMC requirements specified in the standard above.

3. TEST CONDITION AND RESULTS

3.1 MAINS TERMINAL DISTURBANCE VOLTAGE TEST

TEST: Limits of mains terminal disturbance voltage					
Method	Measurements were made on a ground plane that extends 1-meter minimum beyond all sides of the system under test. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.				
Basic Standard		FCC Part 15			
Parameters recorded during the test		Laboratory Ambient Temperature	22 °C		
		Relative Humidity	47 %		
-	Frequency range on each side of line		Measurement Point		
Fully configured sample scanned over the following frequency range		150 kHz to 30 MHz	AC Input port of EUT		
Limits - Class B					
Frequency (MHz)	Limit (dBμV)				
	Quasi-Peak	Result	Average	Result	
0.15 to 0.50	66 to 56	Pass	56 to 46	Pass	
0.50 to 5	56	Pass	46	Pass	
5 to 30	60	Pass	50	Pass	
EUT Configuration Settings:					
Power Interface Mode # (See Section 2.3)		EUT Operation Mode # (See 2.4)		EUT Configurations Mode # (See Section 2.7)	
1		2, 3		1	
Conducted Emissions Test Equipment used:					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI TEST RECEIVER	ROHDE & SCHWARZ	ESCI	100364	2012.03.06	2013.03.06
LISN	ROHDE & SCHWARZ	ESH2-Z5	828739/006	2012.09.18	2013.09.18
LISN	TTI	LISN1600	197204	2012.07.02	2013.07.02
50 OHM TERMINATOR	TME	CT-01	N/A	2012.01.09	2013.01.09

Figure 1. Graphical representation of conducted emissions : DVI Mode



Project Number: 12CA45851
 Model Number: AMM215MWTD
 Client Name: ADVAN INT'L CORP.

File Number MC16222 Page 15 of 29

Table 1. Conducted emissions Test data : DVI Mode

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	0.41028	38.1	34.1	0.2	38.3	34.3	57.6	47.6	19.3	13.3	N
2	17.26450	30.0	20.2	0.9	30.9	21.1	60.0	50.0	29.1	28.9	N
3	0.40969	37.9	34.0	0.2	38.1	34.2	57.7	47.7	19.6	13.5	L1
4	17.25650	32.7	22.2	0.9	33.6	23.1	60.0	50.0	26.4	26.9	L1

*** Note:**

1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 2. Graphical representation of conducted emissions : VGA Mode

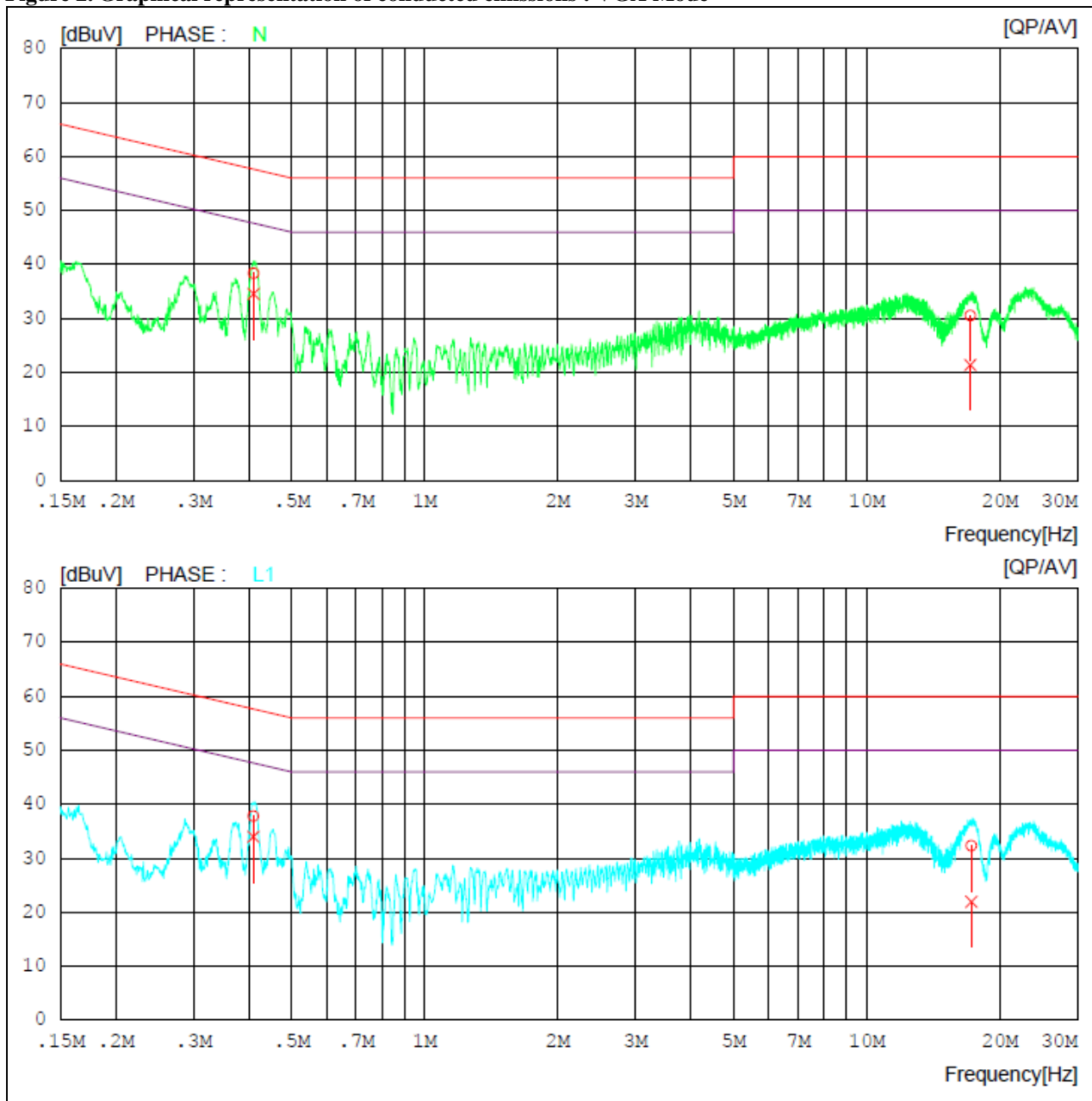


Table 2. Conducted emissions Test data : VGA Mode

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	0.41054	38.2	34.3	0.2	38.4	34.5	57.6	47.6	19.2	13.1	N
2	17.15350	29.7	20.5	0.9	30.6	21.4	60.0	50.0	29.4	28.6	N
3	0.40984	37.6	33.8	0.2	37.8	34.0	57.7	47.7	19.9	13.7	L1
4	17.25400	31.4	21.1	0.9	32.3	22.0	60.0	50.0	27.7	28.0	L1

*** Note:**

1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

3.2 RADIATED DISTURBANCE

TEST: Limits for radiated disturbance					
Method	Frequency scans were conducted with a peak detector with horizontal and vertical polarization of the antenna. Measurements were done in the frequency range 30-1000 MHz. The main test was then conducted by measurements at each frequency found in the pretest. These measurements were done at an open area test site at 3m distances, with a quasi-peak detector. EUT was positioned on a wooden table 0.8m above the floor, at the edge of the turntable. Cables connected to EUT were fixed to cause maximum emission. A maximum emitting point for each frequency was found by turning EUT 0-360 degrees, and adjust the antenna height between 1-4m. A quasi-peak detector measurement was then done at the maximum emitting point.				
	The measurements (above 1 GHz) were made 3 m distance test site. The EUT was placed on a non-conductive turntable approximately 0.8 m above the ground plane. The turntable with EUT was rotated 360°, and the antenna was varied in height between 1.0 m and 4.0 m in order to determine the maximum emission levels.				
	This procedure was performed for both horizontal and vertical polarization of the receiving antenna.				
	The measurements were conducted with Average and Peak value.				
Basic Standards		FCC Part 15			
Parameters recorded during the test		Laboratory Ambient Temperature		22 °C	
		Relative Humidity		47 %	
-		Frequency range		Measurement Point	
Fully configured sample scanned over the following frequency range		30 MHz – 1.0 GHz		3 meter measurement distance	
		1.0 GHz ~ 6.0 GHz		3 meter measurement distance	
Limits – Class B					
Frequency (MHz)		Limit (dBµV/m)			
		Quasi-Peak		Results	
30 to 230		30.00		Pass	
230 to 1000		37.00		Pass	
-		Average	Peak	-	
Above 1000		54	74	Pass	
EUT Configuration Settings:					
Power Interface Mode # (See Section 2.3)		EUT Operation Mode # (See 2.4)		EUT Configurations Mode # (See Section 2.7)	
1		2, 3		1	
Radiated Emissions Test Equipment:					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI TEST RECEIVER	ROHDE & SCHWARZ	ESU	100014	2012.01.09	2013.01.09

Project Number: 12CA45851 File Number MC16222 Page 19 of 29
Model Number: AMM215MWTD
Client Name: ADVAN INT'L CORP.

BILOG ANTENNA	SCHAFFNER	CBL6112D	22609	2010.12.21	2012.12.21
HORN ANTENNA	SCHWARZBECK	BBHA9120A	322	2012.05.15	2014.05.15
AMPLIFIER	H/P	8447E	2945A02865	2012.01.09	2013.01.09
AMPLIFIER	TSJ	MLA-00108- B02-36	1518831	2012.01.09	2013.01.09

Figure 3. Graphical representation of Radiated emission : DVI Mode (30 MHz ~ 1 GHz)

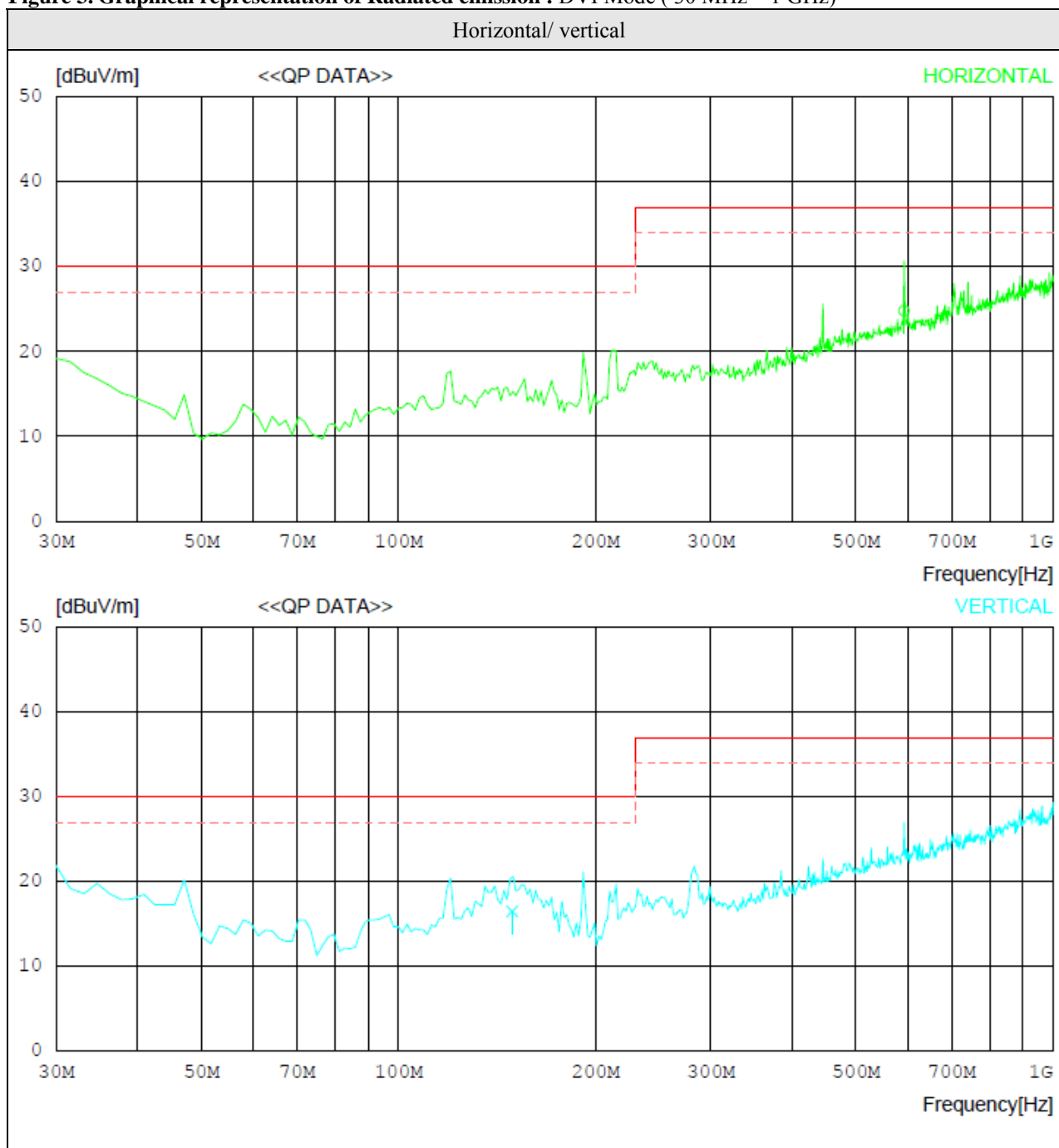


Table 3. Radiated emission Test data : DVI Mode (30 MHz ~ 1 GHz)

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	592.343	26.2	18.8	4.5	24.7	24.8	37.0	12.2	298	0
--- Vertical -----										
2	149.247	26.4	11.1	2.1	23.1	16.5	30.0	13.5	112	4

*** Note:**

1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 4. Graphical representation of Radiated emission : DVI Mode (1 ~ 6) GHz _ Peak)

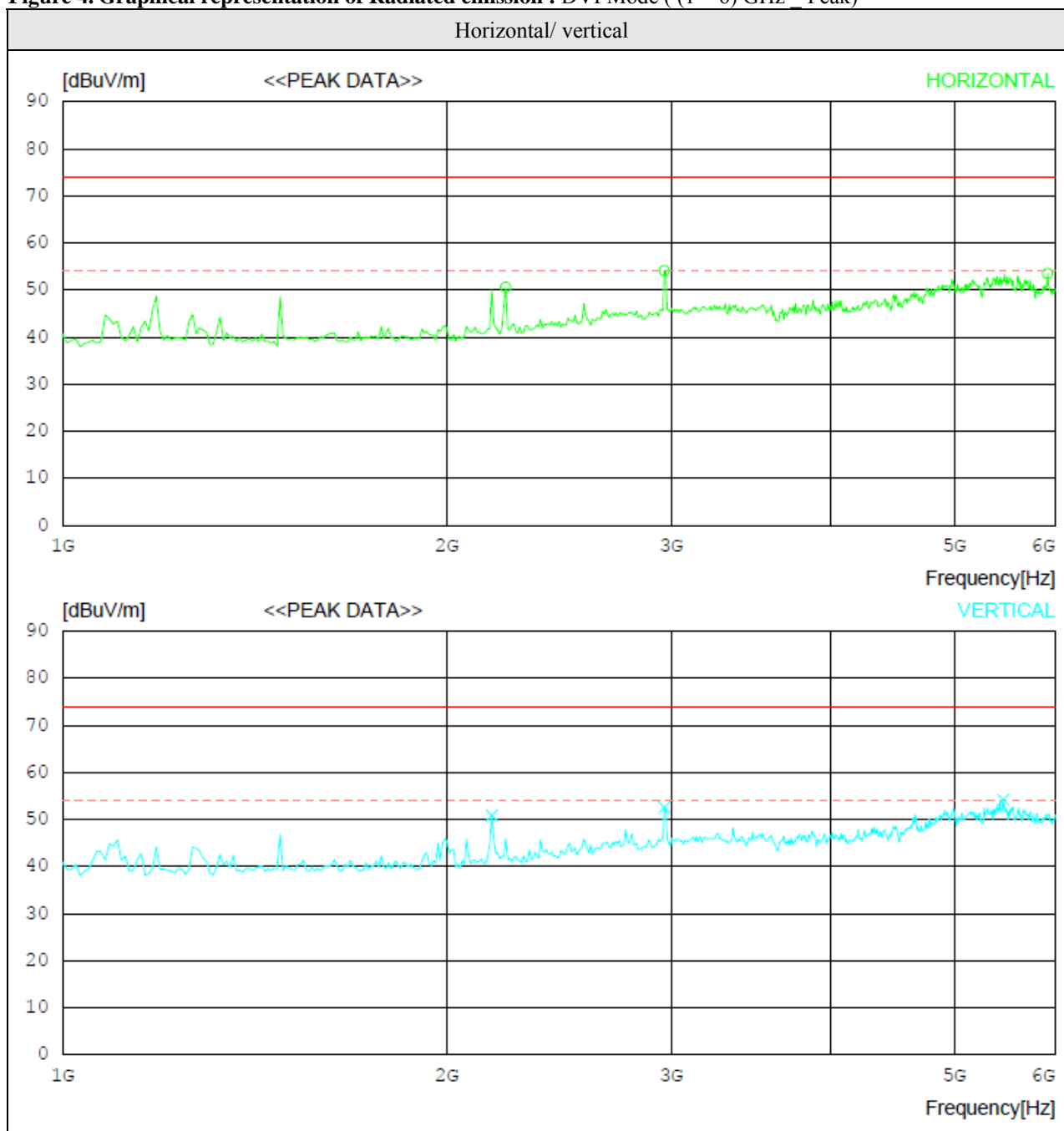


Table 4. **Radiated emission Test data** : DVI Mode ((1 ~ 6) GHz _ Peak)

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	2225.964	57.5	25.9	8.9	41.7	50.6	74.0	23.4	100	1
2	2963.154	56.6	28.9	10.4	41.8	54.1	74.0	19.9	100	224
3	5919.874	47.5	32.3	15.7	42.0	53.5	74.0	20.5	100	1
--- Vertical -----										
4	2169.873	58.3	25.5	8.8	41.7	50.9	74.0	23.1	100	215
5	2963.154	55.1	28.9	10.4	41.8	52.6	74.0	21.4	100	358
6	5463.150	47.1	34.9	14.9	42.7	54.2	74.0	19.8	100	358

*** Note:**
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 5. Graphical representation of Radiated emission : DVI Mode ((1 ~ 6) GHz _ Average)

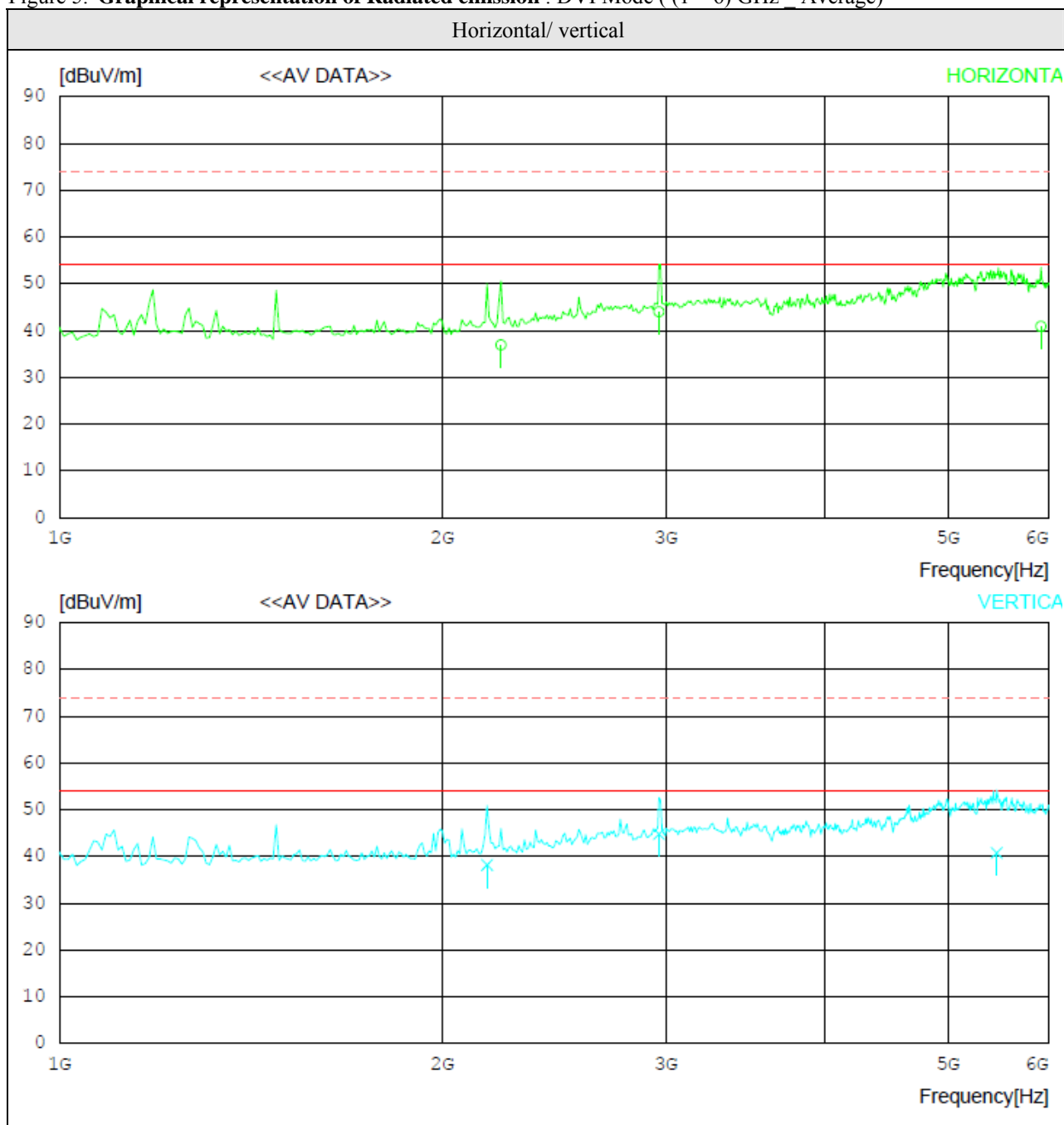


Table 5. Radiated emission Test data : DVI Mode ((1 ~ 6) GHz _ Average)

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	2225.964	43.8	25.9	8.9	41.7	36.9	54.0	17.1	100	1
2	2963.154	46.5	28.9	10.4	41.8	44.0	54.0	10.0	100	224
3	5919.874	34.9	32.3	15.7	42.0	40.9	54.0	13.1	100	1
--- Vertical -----										
4	2169.873	45.6	25.5	8.8	41.7	38.2	54.0	15.8	100	215
5	2963.154	47.3	28.9	10.4	41.8	44.8	54.0	9.2	100	358
6	5463.150	33.7	34.9	14.9	42.7	40.8	54.0	13.2	100	358

*** Note:**
 1. Margin (dB)= Limit (dBuV) - Level (dBuV)
 2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 6. Graphical representation of Radiated emission : VGA Mode (30 MHz ~ 1 GHz)

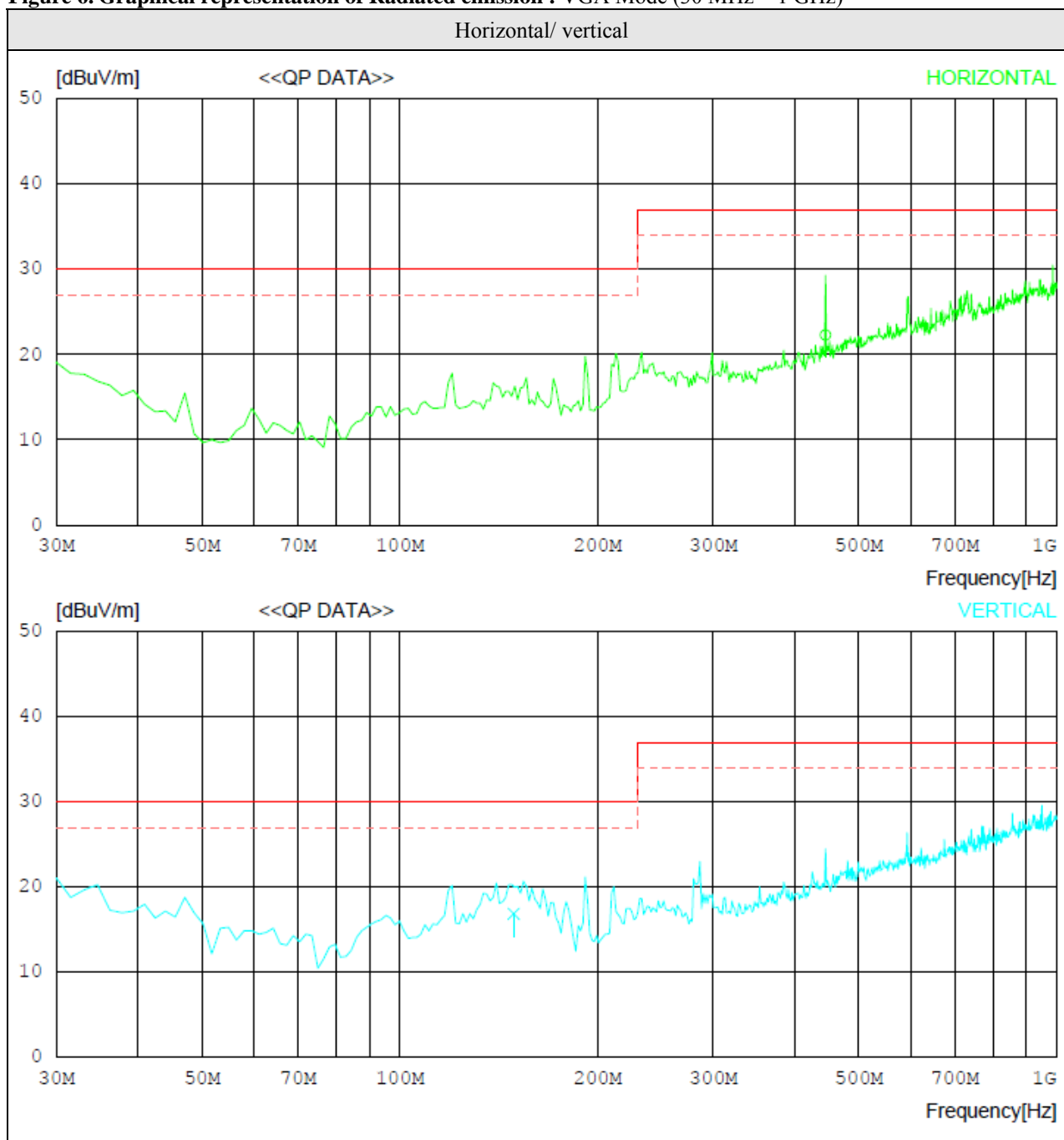


Table 6. Radiated emission Test data : VGA Mode (30 MHz ~ 1 GHz)

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	445.019	26.1	16.9	3.9	24.6	22.3	37.0	14.7	297	160
--- Vertical -----										
2	149.131	26.8	11.1	2.1	23.1	16.9	30.0	13.1	108	351

*** Note:**

1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 7. Graphical representation of Radiated emission : VGA Mode ((1 ~ 6) GHz _ Peak)

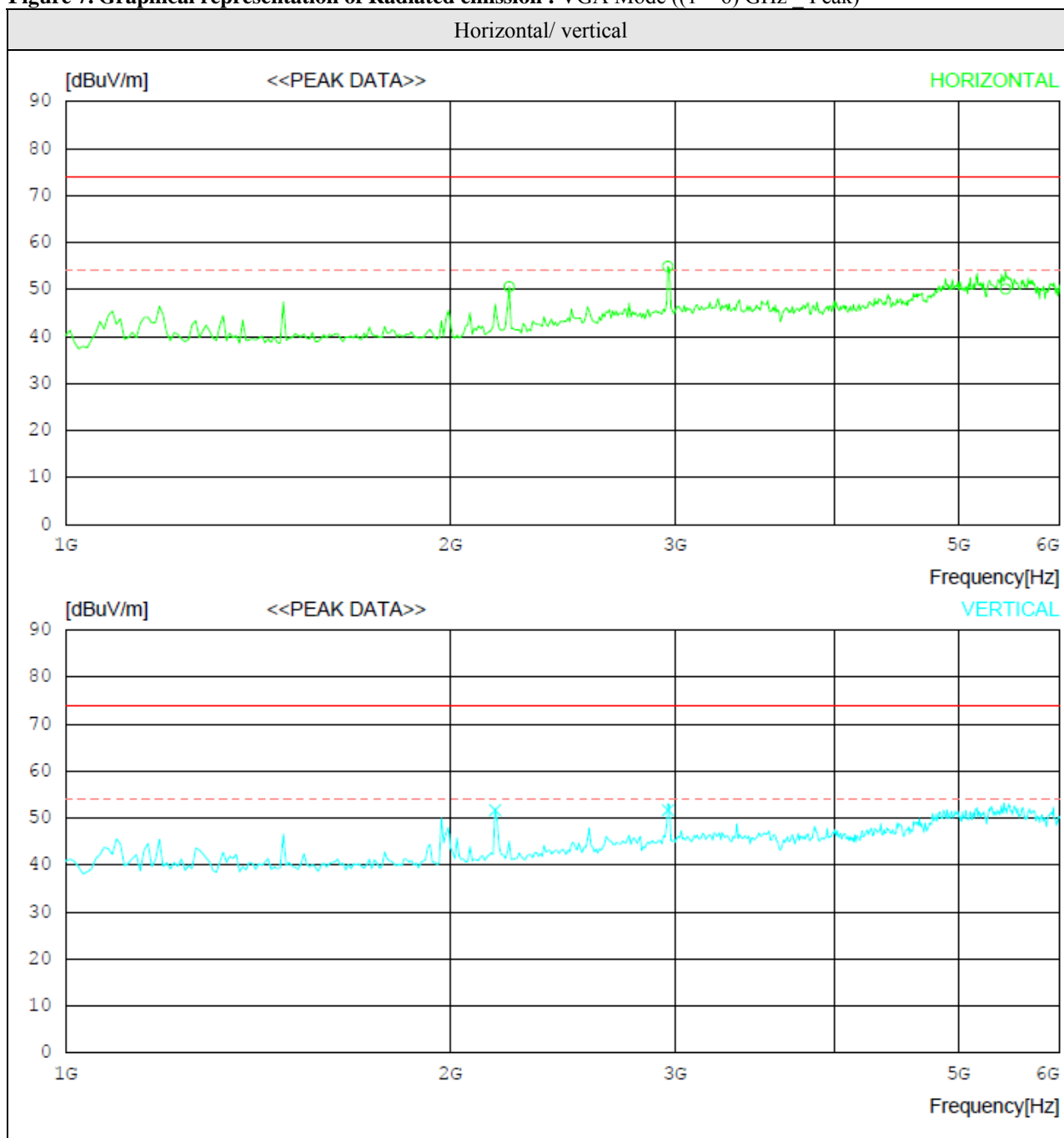


Table 7. **Radiated emission Test data** : VGA Mode ((1 ~ 6) GHz _ Peak)

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	2225.964	57.6	25.9	8.8	41.7	50.6	74.0	23.4	100	358
2	2963.154	57.4	28.9	10.4	41.8	54.9	74.0	19.1	100	358
3	5447.125	46.7	34.8	10.4	41.8	50.1	74.0	23.9	100	351
--- Vertical -----										
4	2169.873	59.5	25.5	8.4	41.7	51.7	74.0	22.3	100	215
5	2963.154	55.6	28.9	8.9	41.7	51.7	74.0	22.3	100	1

*** Note:**
1. Margin (dB)= Limit (dBuV) - Level (dBuV)
2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.

Figure 8. Graphical representation of Radiated emission : VGA Mode ((1 ~ 6) GHz_Average)

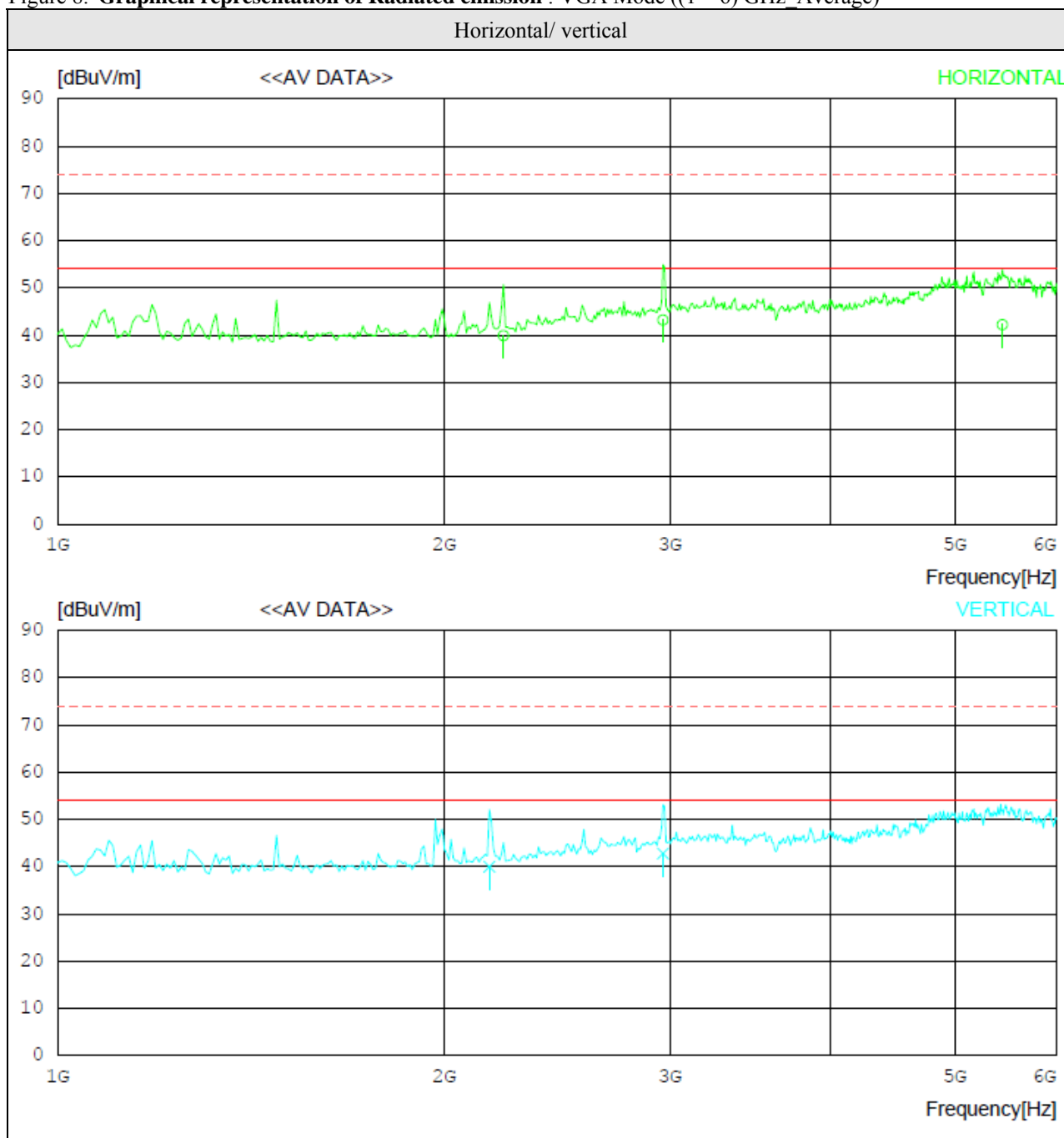


Table 8. Radiated emission Test data : VGA Mode ((1 ~ 6) GHz _ Average)

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	2225.964	46.8	25.9	8.9	41.7	39.9	54.0	14.1	100	358
2	2963.154	45.7	28.9	10.4	41.8	43.2	54.0	10.8	100	358
3	5447.125	35.1	34.8	14.9	42.6	42.2	54.0	11.8	100	351
---- Vertical -----										
4	2169.873	47.4	25.5	8.8	41.7	40.0	54.0	14.0	100	215
5	2963.154	45.3	28.9	10.4	41.8	42.8	54.0	11.2	100	1

*** Note:**
 1. Margin (dB)= Limit (dBuV) - Level (dBuV)
 2. If no frequencies are specified in the tables, no measurement for quasi-peak or average was necessary.