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Project:	13CA07249
File:	MC16222
Report:	13CA07249-FCC
Date:	March 18, 2013
Model:	0240031000
Multi-listing model number:	240-031-000, 0240-031-000
FCC ID:	QVXAMM261WTDSW

Electromagnetic Compatibility Test Report

For

26” Wireless LED Display

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

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 and ICES-003 Issue 4, Class B digital Apparatus.				
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.

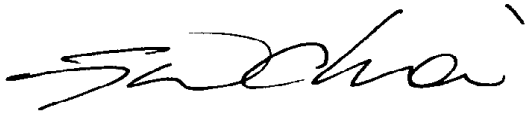
The equipment under test has

☐ Met the technical requirements

☒ Met the technical requirements under the limited condition

☐ Not met the technical requirements

Witnessed By:
Sung Hoon Baek, Senior Project Engineer
UL Verification Services – 3014ASEO
UL Korea Ltd.
March 18, 2013



Reviewed by
Jeawoon Choi, WiSE Engineering Leader
UL Verification Services – 3014ASEO
UL Korea Ltd.
March 18, 2013

Test Report Details

Test report No:	13CA07249-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:	26” Wireless LED Display
Model Number:	0240031000
Multi-listing model number:	240-031-000 and 0240-031-000 The manufacturer has declared to all the multiple model names into the basic model without any further evaluation by UL.
FCC ID:	QVXAMM261WTDSW
Trademark:	stryker®
Product standards:	FCC Part 15 Subpart B and ICES-003 Issue 4, Class B digital Apparatus.
Test Procedure:	ANSI C63.4 : 2009
Sample Serial Number:	N/A
Sample Receive Date:	March 1, 2013
Testing Start Date:	March 1, 2013
Date Testing Complete:	March 18, 2013
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

1.1 Report Revision History:

Revision Date	Description	Remarks
-	Original	-

1.2 Equipment Description:

Description:
26" Wireless LED Display

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	0240031000	-
2	AC/DC Adapter	Bridge power	BPM150S24F11	-
3	Hospital-grade AC power cord	Bridge power	-	-
4	Extension cable	Bridge power	1501047020	15-ft. (5 pin) DC extension cable
5	Extension cable	Bridge power	1501047022	75-ft. (5 pin) DC extension cable
6	Extension cable	Bridge power	1501047021	4pin to 5pin extension cable

1.4 Technical Data:

Display	
LCD Display Panel	26" (661 mm) Diagonal (a-Si TFT active matrix LCD)
Synchronization	2.5 – 5.0 Vpp separated sync
Pixel Pitch	0.300 (H) x 0.300 (V) mm
Response Time	< 18 ms Typ
Viewing Angle	Right/Left/Up/Down 89 Degrees
Display Colors	1 billion colors (10 bit)
Native Resolution	1920 (H) dots × 1080 (V) lines
Input Signal	1 DVI, C-Video, S-Video,
Maximum Pixel Clock	165 MHz
Electrical	
Power Adapter	Input: 100 – 240 VAC; 50 – 60 Hz; 2.5 A Output: 24V; 6.25 A Model Number: BPM150S24F11
Power Consumption	150 W (max)
Dimensions	
Dimensions (W × H× D)	Input: 100 – 240 VAC; 50 – 60 Hz; 2.5 A Output: 24V; 6.25 A Model Number: BPM150S24F11
Weight (approximate)	8.6 kg; 19 lbs.
VESA Mounting Interface	VESA 100 × 100 mm

1.5 EUT Internal Operating Frequency

Frequency (MHz)	Description	Frequency (MHz)	Description
192.375 MHz	Memory Clock	27.000 MHz	System Clock
148.5 MHz	Display Clock	28.322 MHz	System Clock

1.6 Technical descriptions and documents:

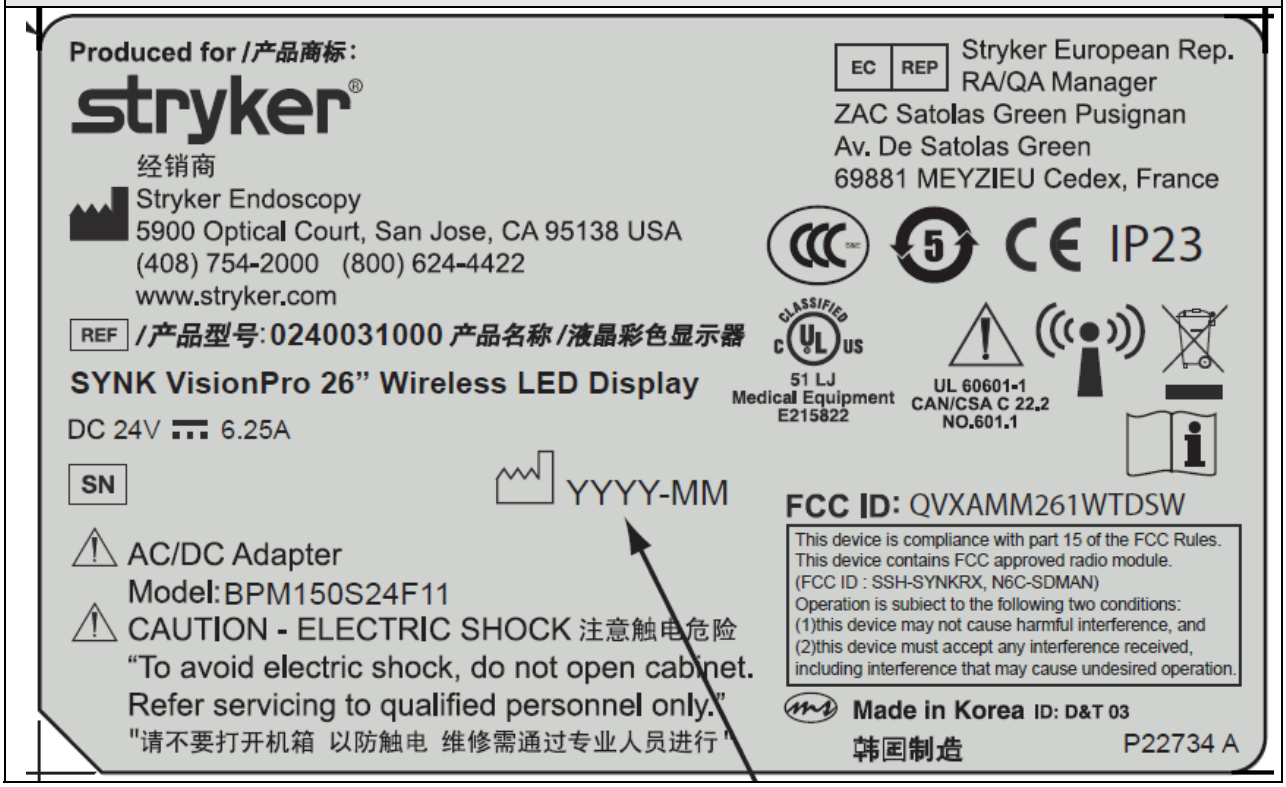
No.	Document Title and Description
1	0240031000 User Manual
***Note:** The manufacturer provided the following document.	

1.7 Detail information of Multi-listing model:

-	Model	Description	Comment
1	0240031000	Basic model	Basic model / Tested
2	240-031-000	Identical with basic model except model name.	Not tested
3	0240-031-000	Identical with basic model except model name.	Not tested
***Note:** The manufacturer has declared to all the multiple model names into the basic model without any further evaluation by UL.			

1.8 Equipment Marking Plate of Product:

Product Label



2. TEST CONDITION

2.1 Equipment Used During Test:

Use*	Product Type	Manufacturer	Model	Comments
EUT	LCD Color Medical Monitor	ADVAN Int'l Corp.	0240031000	-
EUT	AC/DC Adapter	Bridge power	BPM150S24F11	-
EUT	Extension cable	Bridge power	1501047020	15-ft. (5 pin) DC extension cable
EUT	Extension cable	Bridge power	1501047022	75-ft. (5 pin) DC extension cable
EUT	Extension cable	Bridge power	1501047021	4pin to 5pin extension cable
AE	PC	Dell Inc	Vostro 460	S/N : 6J7JXBX
AE	DVD Player	Sony EMCS sdn Bnd.	DVP-NS92V	S/N : 200407
AE	Keyboard	Dell Inc	KB113t	S/N : (N-01)30KG-71616-24B-0CJB-A00
AE	Mouse	Dell Inc	MS111-T	S/N : (N-0kw2YH-71616-23T-OX-4L
AE	Headset	Cosy	COV903	-
***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	AC	AC	1.6	Non shielded	Hospital-grade AC power cord
2	DVI	I/O	1.8	Shielded	24 pin DVI-D
3	S-VIDEO	I/O	1.6	Shielded	-
4	C-VIDEO	I/O	1.6	Shielded	-
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	100 – 240 VAC	-	-	50-60Hz	Rated of AC to DC Adapter
1	AC 120 V	-	-	60Hz	-

2.4 Test Operating Mode:

Mode #	Mode	Comments
1	DVI Mode	Worst case condition
2	S-VIDEO In/Out Mode	Worst case condition
3	C-Video In/Out Mode	-

*** Note:**
1. All the configuration described above has been investigated during the preliminary testing and selected two cases as worst-case condition for final measurements.
2. EUT has been performed under continuous displaying “H” Patten for configuration Modes of 1.
3. EUT has been performed under continuous displaying “Color Bar” Patten for configuration Modes of 2 and 3.

2.5 Modes of Video Resolution:

Mode #		Resolution	Comments
1	DVI Mode	640 x 480 @60Hz	-
2		1024 x 768 @ 60Hz	-
3		1920 x 1080p @60Hz	Worst case condition (Range of Brightness: 100, Range of contrast: 100 And range of backlight: 100.
4	C-Video Mode	480i 60Hz	-
5	S-Video Mode	480i @3.58MHz	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.			

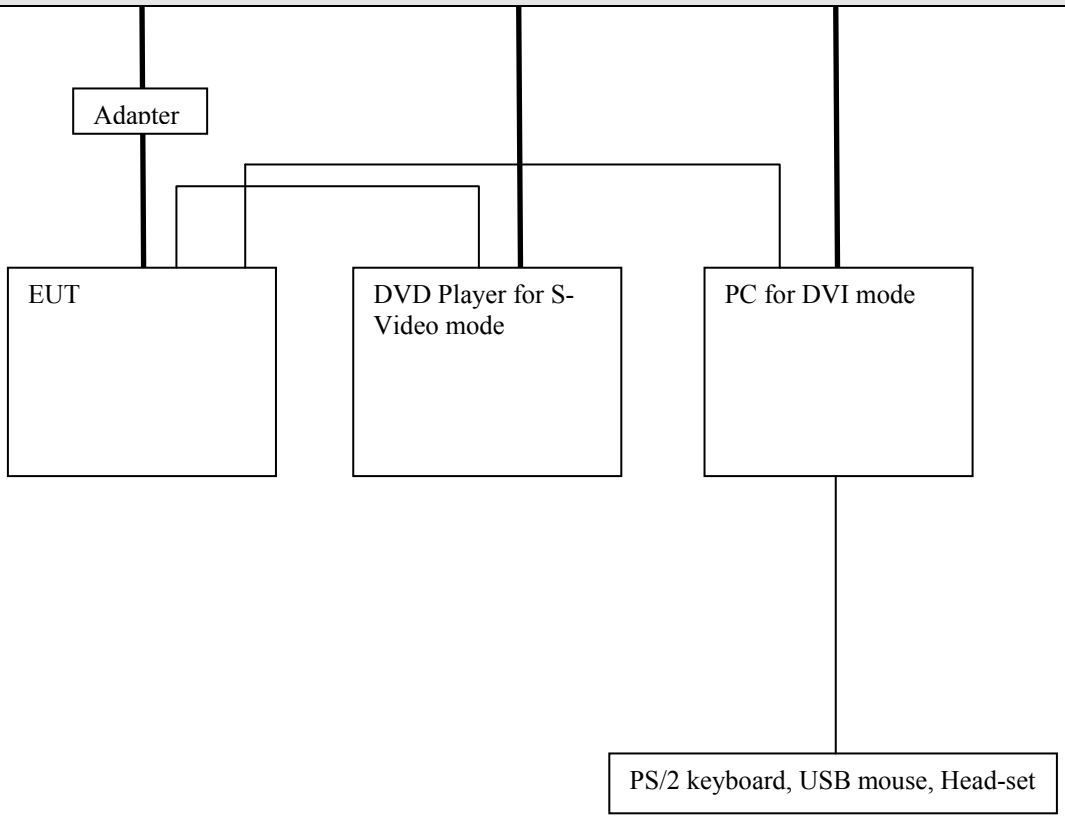
2.6 Used D.C. Extension Cable for Test:

No.	Cable Length	Preliminary Test	Comment
1	15ft	DVI, S-Video and S-Video Mode	-
2	75ft		Selected for 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:

1. Test configuration for DVI and S-Video Mode



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 and ICES-003 Issue 4, Class B digital Apparatus.	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 and ICES-003 Issue 4, Class B digital Apparatus 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		47 CFR Part 15.107(a) / 47 CFR Part 15.109(a) Class B and ICES-003 Issue 4, Class B digital Apparatus.	
Parameters recorded during the test		Laboratory Ambient Temperature	23 °C
		Relative Humidity	31 %
-		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
Instrument settings		RBW	9KHz
		VBW	10 kHz

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 2.6)
1	1 and 2	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	2013.01.08	2014.01.08

Figure 1. Graphical representation of conducted emissions : DVI Mode

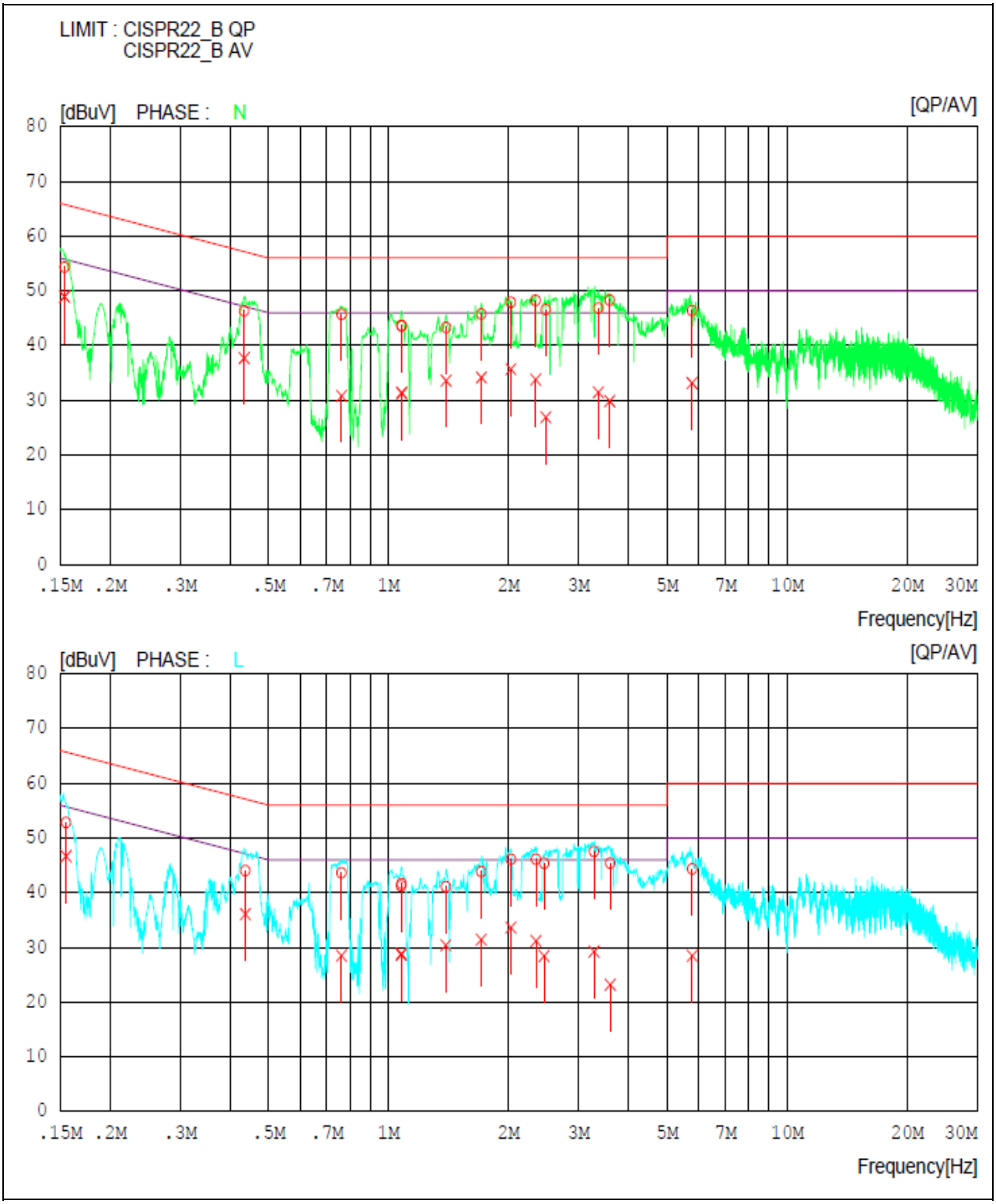


Table 1. Conducted emissions Test data : DVI Mode

NO	FREQ	READING		C.FACTOR	RESULT		LIMIT		MARGIN		PHASE
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15399	54.1	48.8	0.2	54.3	49.0	65.8	55.8	11.5	6.8	N
2	0.43460	46.1	37.5	0.2	46.3	37.7	57.2	47.2	10.9	9.5	N
3	0.76255	45.5	30.6	0.2	45.7	30.8	56.0	46.0	10.3	15.2	N
4	1.07950	43.3	31.0	0.3	43.6	31.3	56.0	46.0	12.4	14.7	N
5	1.07900	43.3	31.1	0.3	43.6	31.4	56.0	46.0	12.4	14.6	N
6	1.39500	43.0	33.3	0.3	43.3	33.6	56.0	46.0	12.7	12.4	N
7	1.71000	45.5	33.9	0.3	45.8	34.2	56.0	46.0	10.2	11.8	N
8	2.02700	47.6	35.4	0.3	47.9	35.7	56.0	46.0	8.1	10.3	N
9	2.34200	47.9	33.5	0.3	48.2	33.8	56.0	46.0	7.8	12.2	N
10	2.48100	46.3	26.6	0.3	46.6	26.9	56.0	46.0	9.4	19.1	N
11	3.36200	46.5	31.2	0.3	46.8	31.5	56.0	46.0	9.2	14.5	N
12	3.58950	48.0	29.6	0.3	48.3	29.9	56.0	46.0	7.7	16.1	N
13	5.77550	45.9	32.7	0.5	46.4	33.2	60.0	50.0	13.6	16.8	N
14	0.15539	52.6	46.5	0.2	52.8	46.7	65.7	55.7	12.9	9.0	L
15	0.43763	43.8	35.9	0.2	44.0	36.1	57.1	47.1	13.1	11.0	L
16	0.76220	43.4	28.3	0.2	43.6	28.5	56.0	46.0	12.4	17.5	L
17	1.07900	41.4	28.5	0.3	41.7	28.8	56.0	46.0	14.3	17.2	L
18	1.07600	41.0	28.4	0.3	41.3	28.7	56.0	46.0	14.7	17.3	L
19	1.39400	40.8	30.1	0.3	41.1	30.4	56.0	46.0	14.9	15.6	L
20	1.70950	43.5	31.1	0.3	43.8	31.4	56.0	46.0	12.2	14.6	L
21	2.02900	45.8	33.3	0.3	46.1	33.6	56.0	46.0	9.9	12.4	L
22	2.34450	45.8	30.9	0.3	46.1	31.2	56.0	46.0	9.9	14.8	L
23	2.45900	45.1	28.1	0.3	45.4	28.4	56.0	46.0	10.6	17.6	L
24	3.28000	47.2	28.9	0.3	47.5	29.2	56.0	46.0	8.5	16.8	L
25	3.60050	45.1	22.9	0.3	45.4	23.2	56.0	46.0	10.6	22.8	L
26	5.78250	43.8	28.0	0.5	44.3	28.5	60.0	50.0	15.7	21.5	L

*** 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 : S-Video Mode

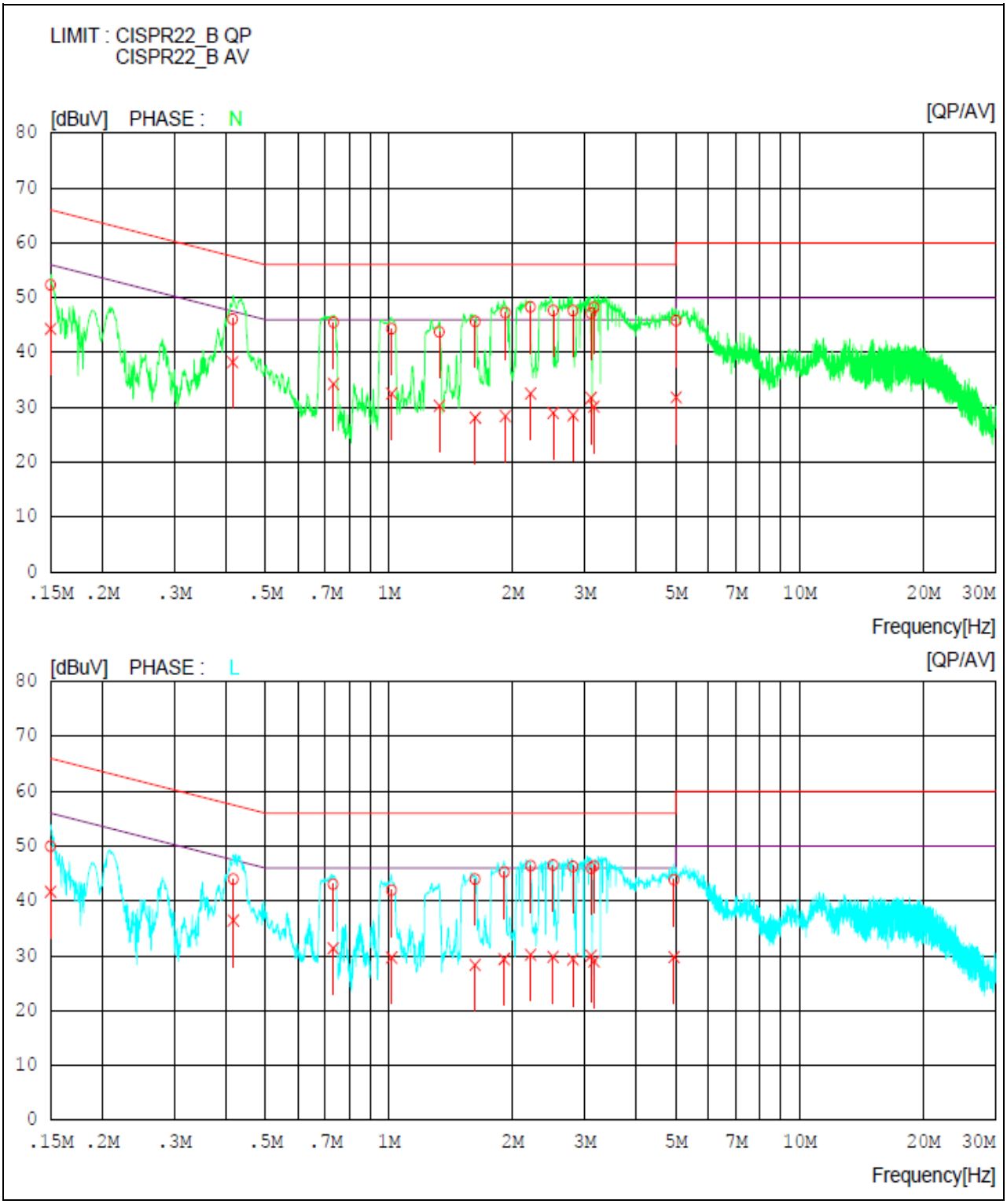


Table 2. Conducted emissions Test data : S-Video Mode

NO	FREQ	READING		C.FACTOR	RESULT		LIMIT		MARGIN		PHASE
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15000	52.1	44.1	0.2	52.3	44.3	66.0	56.0	13.7	11.7	N
2	0.41650	45.9	38.0	0.2	46.1	38.2	57.5	47.5	11.4	9.3	N
3	0.73326	45.3	34.1	0.2	45.5	34.3	56.0	46.0	10.5	11.7	N
4	1.01550	44.0	32.2	0.3	44.3	32.5	56.0	46.0	11.7	13.5	N
5	1.32750	43.4	30.0	0.3	43.7	30.3	56.0	46.0	12.3	15.7	N
6	1.62400	45.3	27.8	0.3	45.6	28.1	56.0	46.0	10.4	17.9	N
7	1.92200	47.0	28.1	0.3	47.3	28.4	56.0	46.0	8.7	17.6	N
8	2.21250	48.0	32.2	0.3	48.3	32.5	56.0	46.0	7.7	13.5	N
9	2.51400	47.4	28.7	0.3	47.7	29.0	56.0	46.0	8.3	17.0	N
10	2.80850	47.3	28.3	0.3	47.6	28.6	56.0	46.0	8.4	17.4	N
11	3.10900	46.8	31.4	0.3	47.1	31.7	56.0	46.0	8.9	14.3	N
12	3.15800	47.9	29.8	0.3	48.2	30.1	56.0	46.0	7.8	15.9	N
13	5.01000	45.4	31.4	0.4	45.8	31.8	60.0	50.0	14.2	18.2	N
14	0.15000	49.8	41.5	0.2	50.0	41.7	66.0	56.0	16.0	14.3	L
15	0.41819	43.8	36.2	0.2	44.0	36.4	57.5	47.5	13.5	11.1	L
16	0.73146	42.9	31.2	0.2	43.1	31.4	56.0	46.0	12.9	14.6	L
17	1.01550	41.7	29.4	0.3	42.0	29.7	56.0	46.0	14.0	16.3	L
18	1.62250	43.7	28.0	0.3	44.0	28.3	56.0	46.0	12.0	17.7	L
19	1.90900	45.0	29.1	0.3	45.3	29.4	56.0	46.0	10.7	16.6	L
20	2.21450	46.1	29.9	0.3	46.4	30.2	56.0	46.0	9.6	15.8	L
21	2.51000	46.2	29.5	0.3	46.5	29.8	56.0	46.0	9.5	16.2	L
22	2.80700	46.0	29.0	0.3	46.3	29.3	56.0	46.0	9.7	16.7	L
23	3.10900	45.7	29.7	0.3	46.0	30.0	56.0	46.0	10.0	16.0	L
24	3.15850	46.1	28.7	0.3	46.4	29.0	56.0	46.0	9.6	17.0	L
25	4.94700	43.5	29.4	0.4	43.9	29.8	56.0	46.0	12.1	16.2	L

*** 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	47 CFR Part 15.107(a) / 47 CFR Part 15.109(a) Class B and ICES-003 Issue 4, Class B digital Apparatus.		
Parameters recorded during the test	Laboratory Ambient Temperature		21 °C
	Relative Humidity		32 %
-	Frequency range		Measurement Point
Fully configured sample scanned over the following frequency range	30 MHz – 1.0 GHz		10 meter measurement distance
	1.0 GHz ~ 6.0 GHz		3 meter measurement distance
Instrument settings	RBW: 120KHz, VBW: 300KHz		For 30MHz to 1000Hz
	RBW: 1 MHz, VBW: 3MHz		Above 1GHz
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 2.6)
1	1 and 2	1

Radiated Emissions Test Equipment:					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	Rohde & Schwarz	ESU	100014	2013.01.08	2014.01.08
BILOG ANTENNA	SCHAFFNER	CBL6112B	2737	2012.11.06	2014.11.06
Horn Antenna	SCHWARZBECK	BBHA9120A	322	2012.05.15	2014.05.15
Amplifier	H/P	8447E	2945A02865	2013.01.08	2014.01.08
Amplifier	TSJ	MLA-100M18-B01-25	1719458	2012.06.04	2013.06.04

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

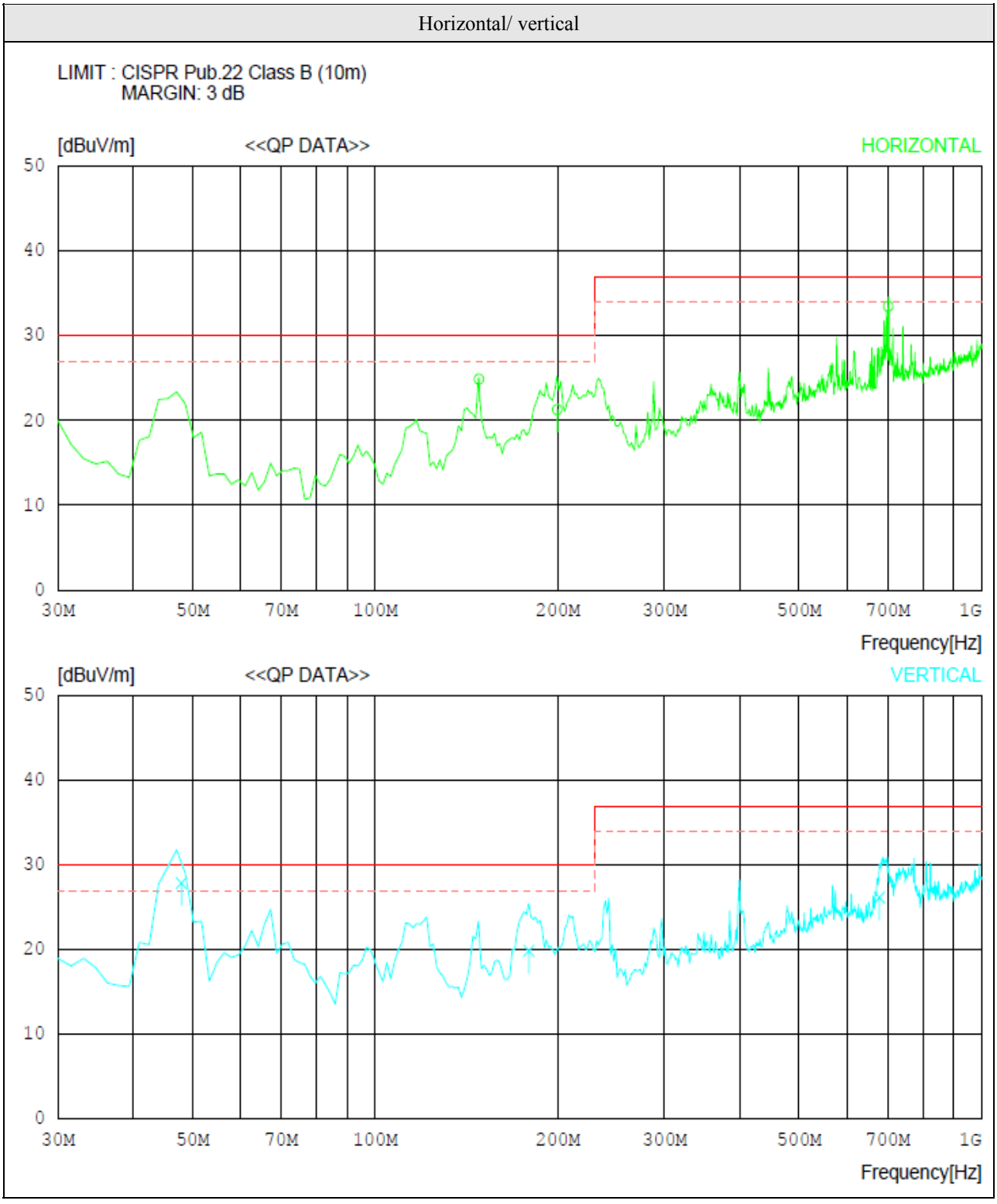


Table 3. Radiated emission Test data : DVI Mode

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	148.353	36.5	10.5	2.1	24.2	24.9	30.0	5.1	325	101
2	199.728	32.9	9.7	2.6	23.9	21.3	30.0	8.7	273	0
3	701.968	33.5	18.6	5.2	23.8	33.5	37.0	3.5	100	1
--- Vertical ------										
4	47.962	40.1	10.6	1.5	24.3	27.9	30.0	2.1	297	359
5	179.304	31.7	9.8	2.5	24.1	19.9	30.0	10.1	100	1
6	678.548	26.3	18.6	5.0	23.7	26.2	37.0	10.8	252	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 4. Graphical representation of Radiated emission : DVI Mode_ Peak

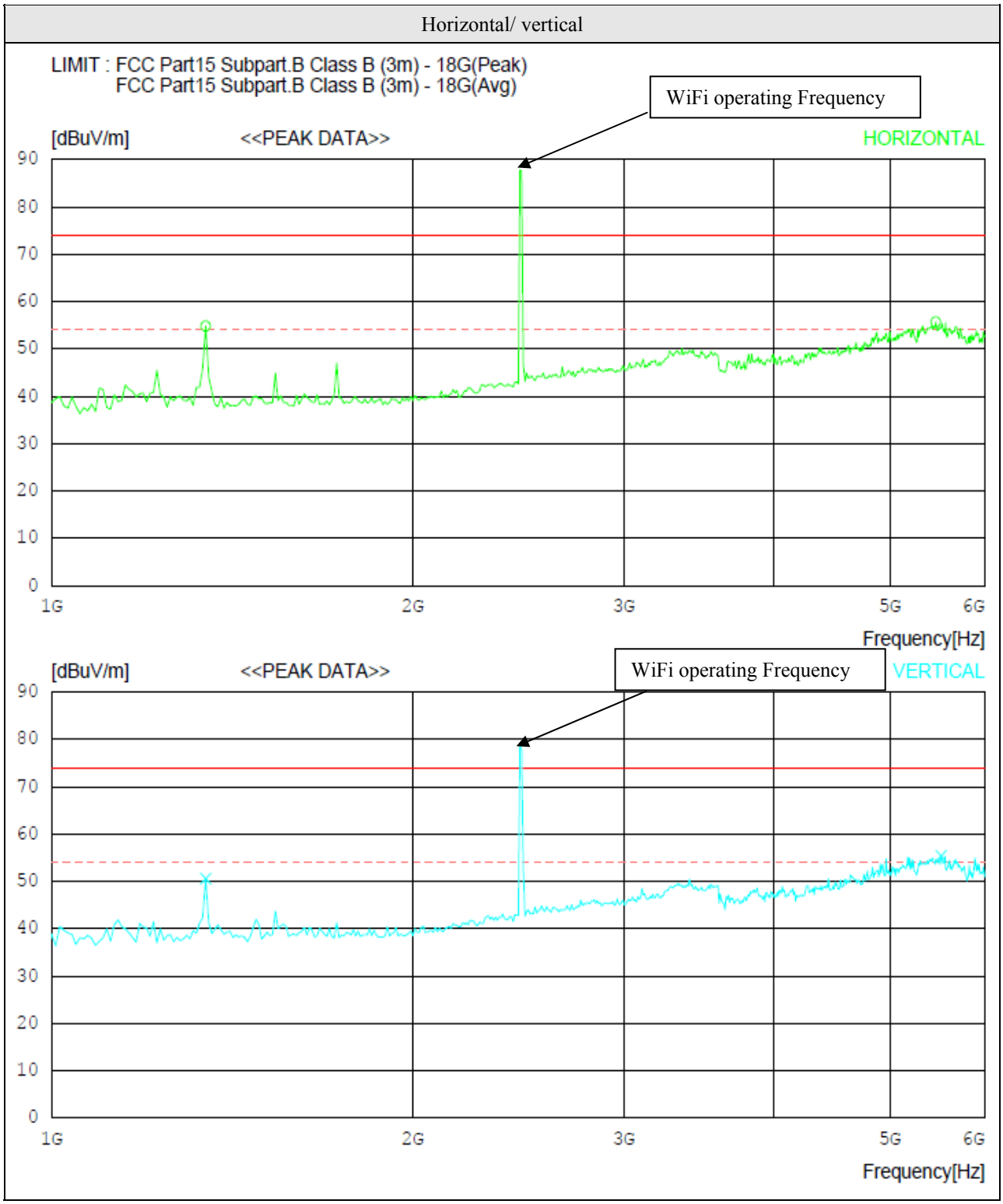


Table 4. Radiated emission Test data : DVI Mode _ Peak

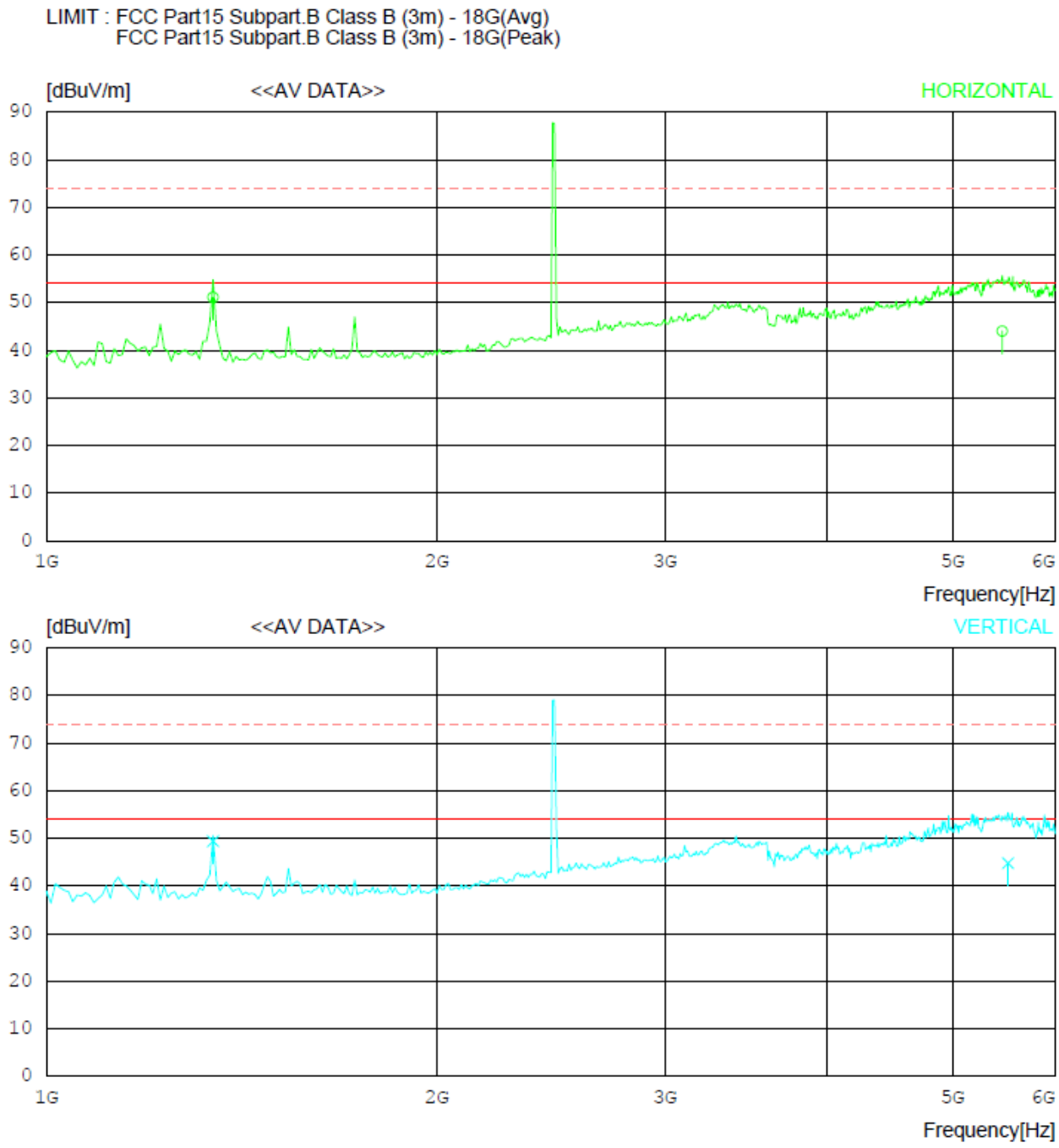
No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
---- Horizontal ------										
1	1344.551	51.9	24.4	7.0	28.5	54.8	74.0	19.2	100	138
2	5463.150	34.0	34.9	14.9	28.1	55.7	74.0	18.3	100	311
---- Vertical ------										
3	1344.551	47.7	24.4	7.0	28.5	50.6	74.0	23.4	100	293
4	5519.239	33.7	35.0	14.9	28.2	55.4	74.0	18.6	100	293

*** 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)

Horizontal/ vertical



*Remark : 2,412 MHz are RF frequency.

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	1344.551	48.2	24.4	7.0	28.5	51.1	54.0	2.9	100	138
2	5463.150	22.3	34.9	14.9	28.1	44.0	54.0	10.0	100	311
---- Vertical ------										
3	1344.551	46.5	24.4	7.0	28.5	49.4	54.0	4.6	100	293
4	5519.239	23.1	35.0	14.9	28.2	44.8	54.0	9.2	100	293

*** 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 : S-Video Mode

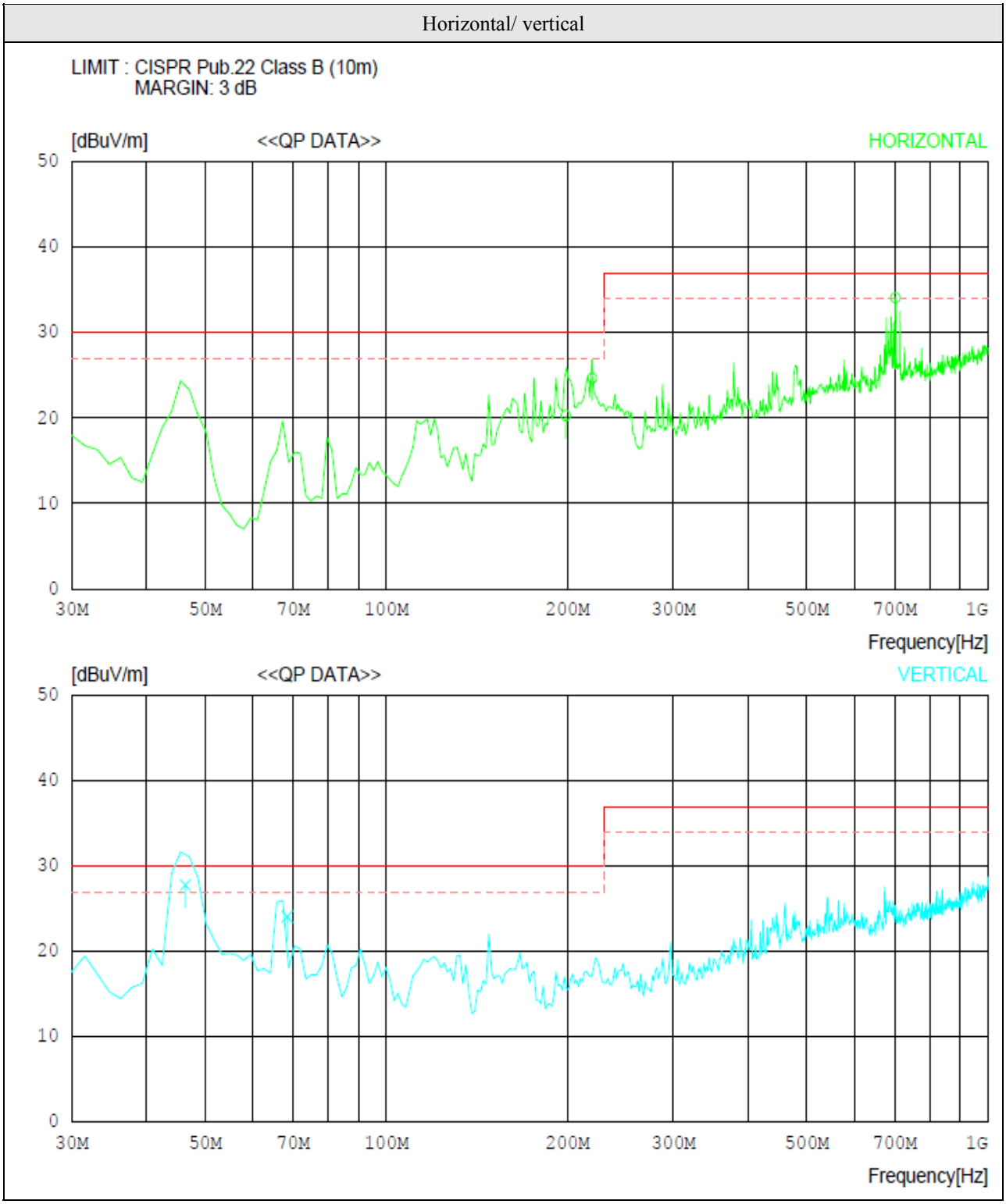


Table 6. Radiated emission Test data : S-Video Mode

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	198.814	31.9	9.7	2.6	23.9	20.3	30.0	9.7	338	262
2	219.978	35.0	10.9	2.7	23.9	24.7	30.0	5.3	341	331
3	702.022	34.1	18.6	5.2	23.8	34.1	37.0	2.9	100	210
--- Vertical ------										
4	46.378	38.4	12.3	1.4	24.3	27.8	30.0	2.2	357	319
5	68.484	40.2	6.2	2.1	24.4	24.1	30.0	5.9	256	319

*** 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 : S-Video Mode _Peak

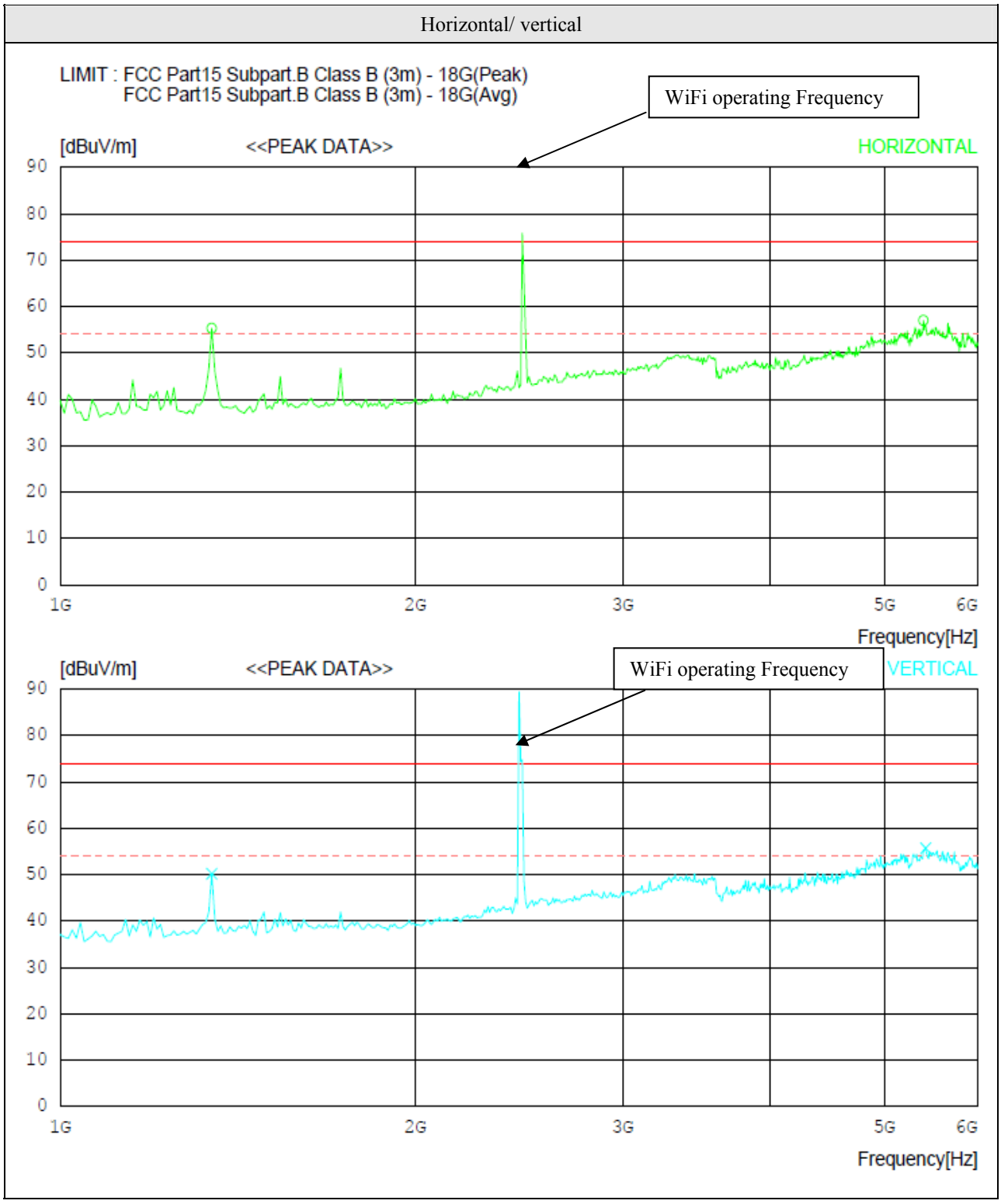


Table 7. Radiated emission Test data : S-Video Mode_ Peak

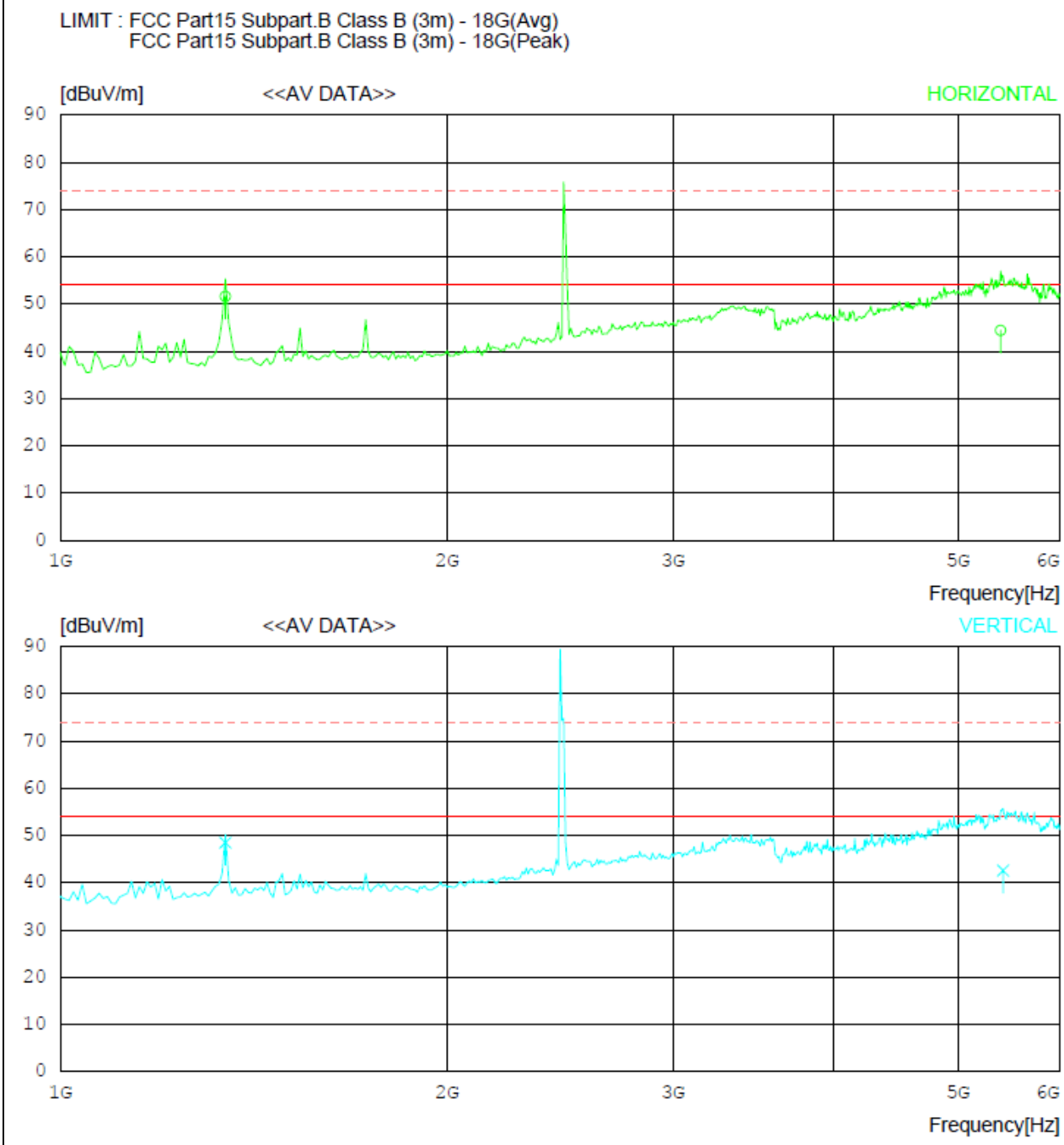
No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
---- Horizontal ------										
1	1344.551	48.7	24.4	7.0	28.5	51.6	54.0	2.4	100	138
2	5399.048	22.9	34.6	15.0	28.1	44.4	54.0	9.6	100	358
---- Vertical ------										
3	1344.551	45.6	24.4	7.0	28.5	48.5	54.0	5.5	100	1
4	5423.086	21.1	34.7	14.9	28.1	42.6	54.0	11.4	100	109

*** 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 : S-VIDEO mode ((1 ~ 6) GHz_Average)

Horizontal/ vertical



*Remark : 2,412 MHz are RF frequency.

Table 8. Radiated emission Test data : **S-VIDEO 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	1344.551	48.7	24.4	7.0	28.5	51.6	54.0	2.4	100	138
2	5399.048	22.9	34.6	15.0	28.1	44.4	54.0	9.6	100	358
---- Vertical ------										
3	1344.551	45.6	24.4	7.0	28.5	48.5	54.0	5.5	100	1
4	5423.086	21.1	34.7	14.9	28.1	42.6	54.0	11.4	100	109

*** 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.

4. TESTING LABORATORY INFORMATION

DIGITAL EMC CO., LTD.
Address : 683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea
http://www.digitalemc.com
Tel: +82-31-321-2664 Fax: +82-31-321-1664

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

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

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