HYUNDAI CALIBRATION & CERTIFICATION TECH. CO., LTD.

Product Compliance Division, EMC Team
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNKI-DO, 467-701, KOREA
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CERTIFICATION

Manufacture;
DVS KOREA CO., LTD

7TH & 8TH FL. KPS BLDG.
196 KUMGOK-DONG, BOONDONG-KU
SUNGNAM CITY, KYUNGKI-DO, KOREA

DVS KOREA FRN : 0010037380

Date of Issue: December 19, 2003

Test Report No.: HCT-F03-1205

Test Site: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD.
HCT FRN : 0005-8664-21

FCC ID : **PGJVXM2300**

MODEL / TYPE : **VXM-2300 / DVD PLAYER**

Rule Part(s):	**FCC PART 15 Subpart B & PART 15 Subpart C(2001)**
Equipment Class:	**CLASS B DVD Player & FM Transmitter**
Port/Connector(s)	**Video Output / RCA Jack**
	Audio Output / RCA Jack
	S-Video Output / RCA Jack
	Digital Output / RCA Jack
	Component Output / RCA Jack
	Remote Output / Jack
	Car Pack/ Jack
	VGA Output / DSUB

This equipment has been shown to be in compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-1992 (Grant Notes: #19, #28).
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Ki Soo Kim

Report prepared by : Ki-Soo Kim
Manager of EMC Tech. Part

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ATTACHMENT A:	FCC ID LABEL & LOCATION
ATTACHMENT B:	EXTERNAL PHOTOGRAPHS
ATTACHMENT C:	BLOCK DIAGRAM(S)
ATTACHMENT D:	TEST SETUP PHOTOGRAPHS
ATTACHMENT E:	USER'S MANUAL
ATTACHMENT F:	INTERNAL PHOTOGRAPHS

MEASUREMENT REPORT

1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

Applicant Name:	**DVS KOREA CO., LTD**
Address:	**7TH & 8TH FL. KPS BLDG.** **196 KUMGOK-DONG, BOONDONG-KU** **SUNGNAM CITY, KYUNGKI-DO, KOREA**

• **Equipment Class**:	Digital Device
• **EUT Type**:	DVD PLAYER
• **Model(s):**	VXM-2300
• **Signal System**	PAL/MULTI, NTSC
• **Output port**	Video, Audio, S-Video, digital Out, Component, VGA, CAR Pack,
• **Power**	DC 12V ~ 24V, 1.5A
• **Weight**	1.203g
• **Operation temperature**	-10℃~ 50℃
• **Operation humidity**	10% ~ 80%
• **External Dimensions**	178(W) x 212.2(D), x 43.0(H)
• **FM Transmitter Frequency**	88.1 MHz ~ 88.9 MHz (88.1 MHz, 88.3 MHz, 88.5 MHz, 88.7 MHz, 88.9 MHz)

KOREA

2.1 INTRODUCTION(Site Information)

The measurement procedure described in American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz (ANSIC63.4-1992) was used in determining radiated and conducted emissions emanating from **DVSKOREA CO., LTD. DVD PLAYER. FCC ID : PGJVXM2300**

The open area test site and conducted measurement facility used to collect the radiated data are located at the 254-1, MAEKOK-RI,HOBUP-MYUN,ICHON-SI,KYOUNGKI-DO, 467-701,KOREA. The site is constructed in conformance with the requirements of ANSI C63.4and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated July 24,2000 (Registration Number: EA90661)

3.1 PRODUCT INFORMATION

3.1.1 Equipment Description

DVS KOREA'S DVD Player(VXM-2300) has two type

One is VGA type and another one is Component type. It's between under following and illustrate about different of type.

Difference point of two models.

The difference between VXM-2200 VGA type & VXM-2200 Component type are only output port **.**

TWO MODELS	Output PORT
VXM-2300 VGA type	**VGA, S-VIDEO** / VIDEO, AUDIO, REOMTE CONTROL, CASSETTE TAPE ADAPTOR, DIGITAL OUT
VXM-2300 Component type	**COMPONENT** / VIDEO, AUDIO, REMOTE CONTROL, CASSETTE TAPE ADAPTOR, DIGITAL OUT

Equipment Under Test (EUT) is **DVS KOREA.CO., LTD. DVD PLAYER.(FCC ID : PGJVXM2300)**

General	System	DVD-Video, DVD-R/RW+R/+RW Super VCD/VCD/CD, CD-R/RW MP3 files/ Picture CD
	Power Supply	DC 12V-24V, 1.5A
	Power consumption	1A, 12W
	Weight	1.203g
	External Dimension	178(W) x 212.2(D), x 43.0(H)
Signal System	NTSC, PAL/MULTI	
Video output	Output lever	1.0Vp-p(75ohm)
	Jacks	RCA Jack
S-Video output	Y-Output lever	1.0Vp-p(75ohm)
	C-Output lever	0.286Vp-p(75ohm)
	Jacks	RCA Jack
Audio output	During audio output	2Vrms(1kHz,0dB)
	Number of channels	2
	Jacks	RCA Jack
Audio Characteristic	Frequency Response	4Hz to 44kHz(DVD is: 96kHz)
	S/N Milo	More than 85dB
	Dynamic Range	More than 85dB
	Total Harmonic distortion	0.08%
Digital Output	Coaxial digital output	RCA Jack

3.1.2 EMI Suppression Devices:

Modifications were made to the device.

Refer to cover letter

4.1 Description of Tests (Conducted & Radiated)

4.1.1 Power line Conducted RFI (150kHz- 30MHz)

The power line conducted RFI measurements were performed according to CISPR 22.
The EUT was placed on a non-conducting 1.0 by 1.5 meter table which is 0.8 meters in height and 0.40 meters away from the vertical wall of the shielded enclosure. Power to the EUT is provided through a Rohde & Schwarz 50 Ω / 50 uH Line Impedance Stabilization Network (LISN) and the support equipment through a separate Solar 50 Ω / 50 uH Line- Conducted Test Facility LISN. Sufficient time for the EUT, support equipment, and test equipment were allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer to determine the frequency producing the maximum EME. The spectrum was scanned from 150kHz to 30 MHz. Each maximum EME was measured using an EMI receiver. The detector function of the receiver was set to CISPR quasi- peak and average mode with the bandwidth set to 9 kHz. Each emission was maximized consistent with the typical applications by varying the configuration of the test sample. Interface cables were connected to the available interface ports of the test unit. The effect of varying the position of cables was investigated to find the configuration that produces maximum Diagram emission. Excess cable lengths were bundled at the centre with 30- 40cm. in length. The worst-case configuration is noted in the test report and the photographs are attached. Each EME reported was calibrated using the Rohde & Schwarz SMX signal generator and are listed on Table 1. RFI Conducted FCC Class B

RFI CONDUCTED	FCC CLASS B Limits dB(uV/m)	CISPR 22 CLASS B Limits dB(uV/m)	
Freq. Range	FCC Class B Quasi-Peak	CISPR 22 Quasi-Peak	CISPR 22 Average
150kHz - 0.5MHz	48*	66-56**	56-46**
0.5MHz - 5MHz	48	56	46
5MHz - 30MHz	48	60	50
*FCC Class B limits starts from 450kHz **Limits decreases linearly with the logarithm of frequency			

Table 1. CISPR 22 CLASS B RFI Conducted Limits

4.1.2 Radiated Emissions

Preliminary measurements were made indoors at 1 meter using broadband antennas, broadband amplifier, and spectrum analyzer to determine the frequency producing the maximum EME. Appropriate precaution was taken to ensure that all EME from the EUT were maximized and investigated. The spectrum was scanned from 30 to 300 MHz using biconical antenna, 300 to 1000 MHz using log- periodic antenna, and above 1 GHz using linearly polarized horn antennas. Final measurements were made outdoors at 10-meter test range using Dipole antennas and EMI receiver. For frequencies above 1 GHz, horn antennas were used. Sufficient time for the EUT, support equipment, and test equipment were allowed in order for them to warm up to their normal operating condition. The EMI receiver detector function was set to CISPR quasi-peak mode and the bandwidth of the receiver was set to 120 kHz. The EUT, support equipment, and interconnecting cables were arranged to the configuration that produces the maximum EME emission found during preliminary scan. The turntable containing the system was rotated; the antenna height was varied 1 to 4 meters and stopped at the azimuth or height producing the maximum emission. Horizontal and vertical antenna polarizations were checked. Each emission was maximized by: varying the mode of operation or resolution; clock or data exchange speed; scrolling H pattern to the EUT and/ or support equipment, and powering the monitor the computer aux AC outlet, if applicable; and changing the polarity of the antenna, whichever determined the worst-case emission.

ITE Radiated Limits			
Frequency (MHz)	**FCC Limit @ 3m. Quasi-Peak dB[μV/m]**	**FCC Limit @ 10m.* Quasi – Peak dB [μV/m]**	**CISPR Limit @ 10m. Quasi-Peak dB [μV/m]**
30-88	**40.0**	**29.5**	**30.0**
88-216	**43.5**	**33.0**	**30.0**
216-230	**46.0**	**35.6**	**30.0**
230-960	**46.0**	**35.6**	**37.0**
960-1000	**54.0**	**43.5**	**37.0**
> 1000	**54.0**	**43.5**	**No Specified Limit**
*** Limit extrapolated 20 dB/decade**			

Table 2. Radiated Class A limits @ 10-meters

4.1.3 Field strength of emissions according to § 15.239(b)

Fundamental Frequency (MHz)	Field Strength of Fundamental at the 3m distance	
	μV/meter	dBμV/meter
88 – 108	250	48

According to §15.239(b), the field strength of emissions from intentional radiators operated under These frequency bands shall not exceed the following :

The test was performed in the anechoic chamber at 3 meter test distance. The EUT was placed on the top of the 0.8 meter high, 1 x 1.5 meter non-metallic table. The biconical antenna was used. To fine the maximum radiation measuring antenna height was changed and the turntable was rotated 360. the antenna polarization was changed from vertical to horizontal.
The EUT was operated in transmitting mode.

4.1.4 Emissions Band Measurement

4.1.4.1 Standard Applicable

According to 15.239(a), emissions from the intentional radiator shall be confined within a band 200kHz wide centered on the operating frequency. The 200kHz band shall lie wholly within the frequency range of 88-108 MHz

4.1.4.2 Measurement Procedure

The Measurement were performed at all channels.
the spectrum trace data around transmitter fundamental frequency was obtained with the spectrum analyzer in “Max Hold” mode. The bandwidth value was determined between two points 26 dB down from the center frequency. The measured results are less than 200kHz. The measured spectrum of the signal is shown in figure 1.

5.1 List of Support Equipment

5.1.1 Support Equipment used

DEVICE TYPE	MANUFACTURER	MODEL NUMBER	FCC ID / DoC	CONNECTED TO
DVD PLAYER (EUT)	DVS KOREA	VXM-2300	PGJVXM2200	N/A
TV	PANASONIC	TC-14S10R2	DoC	EUT
Cassette tape adaptor	SAISONIC	BP-4700	DoC	EUT
Termination	S-Video port 75Ω Component port 75Ω Digital Out port 75Ω Video port 75Ω Audio port 30KΩ			

5.1.2 Cable Description

		Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (M)
DVD PLAYER (EUT)	Power	N	N/A	1.8(P)
	Video	N/A	Y	1.6(D)
	Audio	N/A	Y	1.6(D)
	Component	N/A	Y	1.6(D)
	D-sub	N/A	Y	1.8(D)
	Remote	N/A	N	3.0(D)
	CAR Pack	N/A	N	0.6(D)
	S-video	N/A	Y	1.5(D)

The marked "(D)" means the Data Cable and "(P)" means the Power Cable.

5.1.3 Noise Suppression Parts on Cable (I/O CABLE)

		Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
DVD PLAYER (EUT)	Video	N	N/A	Y	BOTH END
	Audio	N	N/A	Y	BOTH END
	Component	N	N/A	Y	BOTH END
	D-sub	Y	BOTH END	Y	BOTH END
	Remote	N	N/A	Y	EUT END
	CAR Pack	N	N/A	Y	EUT END
	S-video	N	N/A	Y	BOTH END

6.1 PRELIMINARY TESTS

6.1.1 AC Power line Conducted Emission Tests

During Preliminary Tests, the following operating mode were investigated

TYPE	DVD Player Mode	The worst operating condition
VGA Type	VGA Mode	
	S-Video Mode	
	Video/Audio Mode	
Component Type	Component Mode	X
	Video/Audio Mode	

6.1.2 Radiated Emission Tests

During Preliminary Tests, the following operating mode were investigated

TYPE	DVD Player Mode	The worst operating condition
VGA Type	VGA Mode	
	S-Video Mode	
	Video/Audio Mode	
Component Type	Component Mode	X
	Video/Audio Mode	

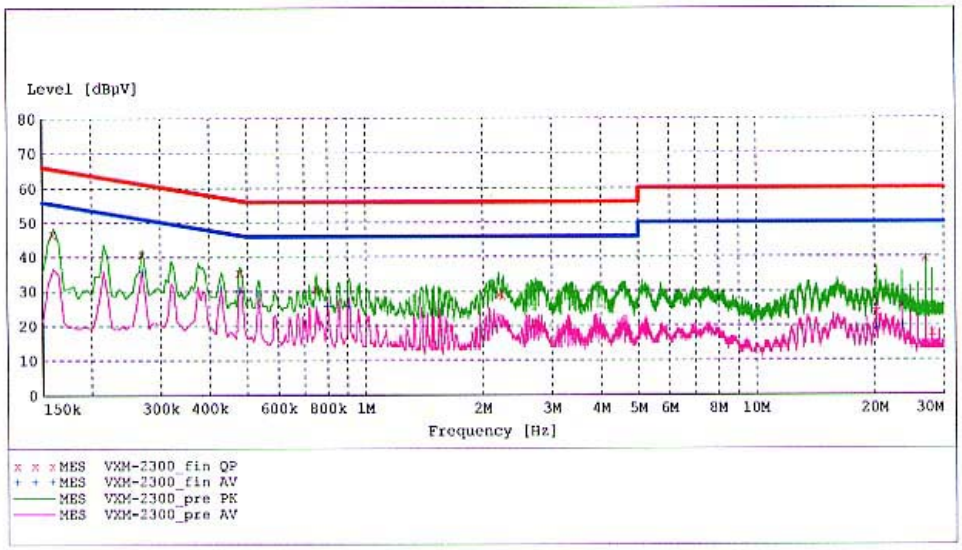
7.1 LINE-CONDUCTED TEST DATA

HYUNDAI C-TECH.
EMC Testing Laboratory

EUT:	VXM-2300
Manufacturer:	DVSKOREA
Operating Condition:	NORMAL
Test Site:	SHIELD ROOM
Operator:	JP-HONG
Test Specification:	CISPR 22 CLASS B
Comment:	H
Start of Test:	12/1/03 / 9:02:14AM

SCAN TABLE: "CISPR 22 Voltage"
Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	500.0 kHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "VXM-2300_fin QP"
12/1/03 9:05AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.160000	46.70	10.1	66	18.7	---	---
0.270000	40.60	10.1	61	20.5	---	---
0.480000	35.50	10.1	56	20.8	---	---
0.750000	30.70	10.1	56	25.3	---	---
2.200000	29.00	10.3	56	27.0	---	---
2.250000	28.50	10.3	56	27.5	---	---
20.205000	23.90	11.5	60	36.1	---	---
27.000000	39.50	11.8	60	20.5	---	---
28.070000	17.80	11.8	60	42.2	---	---

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MEASUREMENT RESULT: "VXM-2300_fin AV"

12/1/03 9:05AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.270000	35.90	10.1	51	15.2	---	---
0.430000	31.10	10.1	47	16.1	---	---
0.480000	30.00	10.1	46	16.3	---	---
0.535000	29.10	10.1	46	16.9	---	---
0.800000	25.70	10.2	46	20.3	---	---
0.910000	25.80	10.2	46	20.2	---	---
20.205000	19.40	11.5	50	30.6	---	---
23.565000	20.10	11.7	50	29.9	---	---
27.000000	39.20	11.8	50	10.8	---	---

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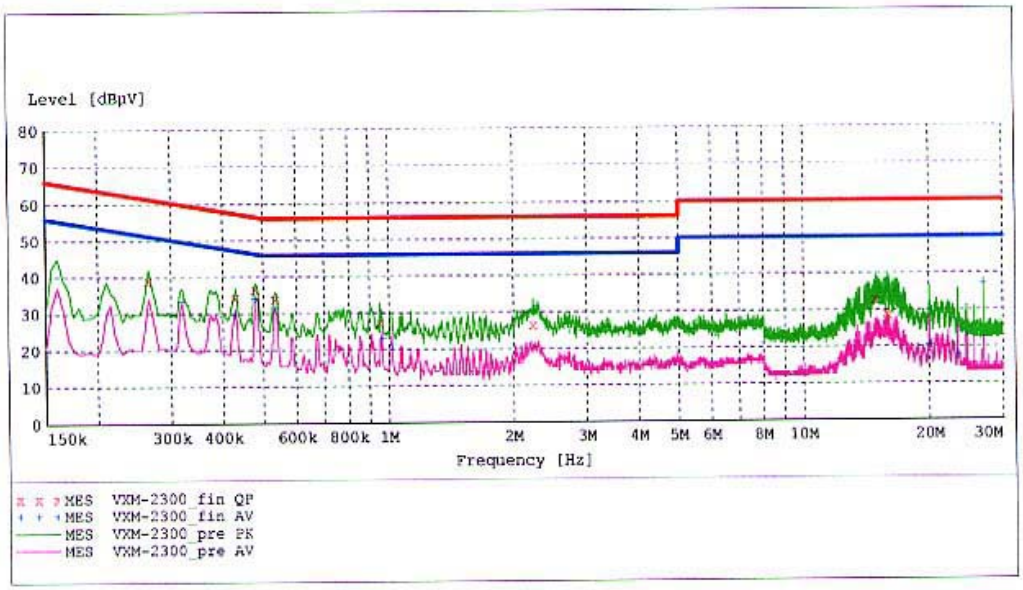
HYUNDAI C-TECH.
EMC Testing Laboratory

EUT:	VXM-2300
Manufacturer:	DVSKOREA
Operating Condition:	NORMAL
Test Site:	SHIELD ROOM
Operator:	JP-HONG
Test Specification:	CISPR 22 CLASS B
Comment:	N
Start of Test:	12/1/03 / 9:10:05AM

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	500.0 kHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "VXM-2300_fin QP"

12/1/03 9:13AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.265000	38.90	10.1	61	22.4	---	---
0.430000	34.30	10.1	57	23.0	---	---
0.480000	36.60	10.1	56	19.7	---	---
0.535000	33.80	10.1	56	22.2	---	---
0.955000	27.10	10.2	56	28.9	---	---
2.230000	26.30	10.3	56	29.7	---	---
14.905000	32.80	11.2	60	27.2	---	---
15.865000	29.00	11.3	60	31.0	---	---
16.025000	28.40	11.3	60	31.6	---	---

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MEASUREMENT RESULT: "VXM-2300_fin AV"

12/1/03 9:13AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.320000	33.40	10.1	50	16.3	---	---
0.430000	29.70	10.1	47	17.5	---	---
0.480000	34.10	10.1	46	12.3	---	---
0.535000	31.40	10.1	46	14.6	---	---
0.965000	23.00	10.2	46	23.0	---	---
1.020000	21.20	10.2	46	24.8	---	---
20.045000	20.50	11.5	50	29.5	---	---
23.385000	17.80	11.7	50	32.2	---	---
27.000000	37.10	11.8	50	12.9	---	---

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NOTES:

1. **All modes of operation were investigated and the worst-case emissions are reported.**
2. **The CISPR RFI conducted limits are listed on Table 1 (Page 4).**
3. **Line A = Phase Line B = Neutral**
4. **Deviations to the Specifications: None**

** Measurements using CISPR quasi-peak mode.

8.1 Radiated Emissions

Frequency MHz	Reading dBuV	Ant. Factor dB/m	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
108.0	22.6	11.3	2.3	V	36.2	43.5	-7.3
175.5	14.6	15.7	3.0	V	33.3	43.5	-10.2
189.0	13.4	16.0	3.1	V	32.5	43.5	-11.0
280.2	14.5	18.4	3.8	H	36.7	46	-9.3
377.6	13.7	16.7	4.5	V	34.9	46	-11.1
472.5	11.4	18.7	5.0	V	35.1	46	-10.9
486.0	13.2	18.9	5.0	H	37.1	46	-8.9
604.2	12.9	21.2	5.6	V	39.7	46	-6.3

Radiated Measurements at 3-meters.

NOTES:

1. **All modes of operation were investigated, and the worst-case emissions are reported(Page 24).**
2. **The radiated limits are listed on Table 2 (Page 7).**

*** Measurements using CISPR quasi-peak mode. Above 1GHz, peak detector function mode is used using a resolution bandwidth of 1MHz and a video bandwidth of 3MHz. The peak level complies with the average limit. Peak mode is used with linearly polarized horn antenna and low-loss microwave cable.

8.1.1 Field strength of emissions according to § 15.239(b)

Frequency MHz	Reading dBuV	Ant. Factor dB/m	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
88.1	33.6	8.5	2.1	V	44.2 Av	48	-3.8
88.1	35.7	8.5	2.1	V	46.3 Pk	68	-21.7
88.3	33.7	8.5	2.1	V	44.3 Av	48	-3.7
88.3	35.3	8.5	2.1	V	45.9 Pk	68	-22.1
88.5	30.8	8.5	2.1	V	41.4 Av	48	-6.6
88.5	32.6	8.5	2.1	V	43.2 Pk	68	-24.8
88.7	32.1	8.5	2.1	V	42.7 Av	48	-5.3
88.7	34.2	8.5	2.1	V	44.8 Pk	68	-23.2
88.9	31.3	8.5	2.1	V	41.9 Av	48	-6.1
88.9	33.7	8.5	2.1	V	44.3 Pk	68	-23.7

Radiated Measurements at 3-meters.

NOTES:

1. **The radiated limits are listed on Table 2 (Page 8).**

2. Av = Average detection mode, Pk = Peak detection mode.

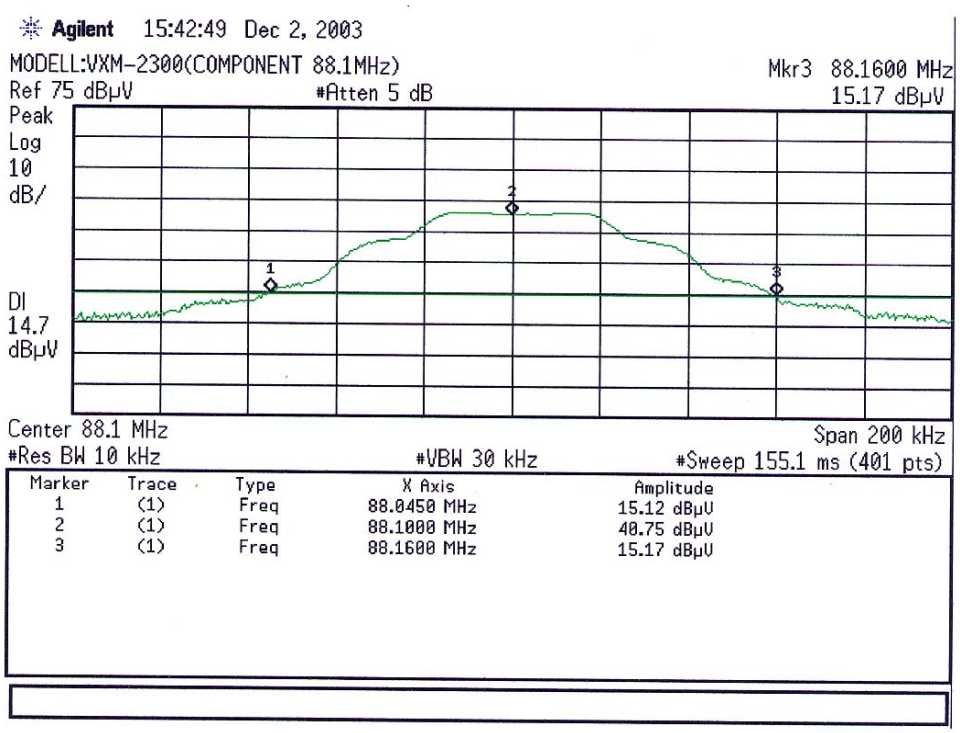
Center Frequency (MHz)	Measured occupied bandwidth (KHz)	Pass/Fail
88.1	60.0	Pass
88.3	76.0	Pass
88.5	59.5	Pass
88.7	59.0	Pass
88.9	58.5	Pass

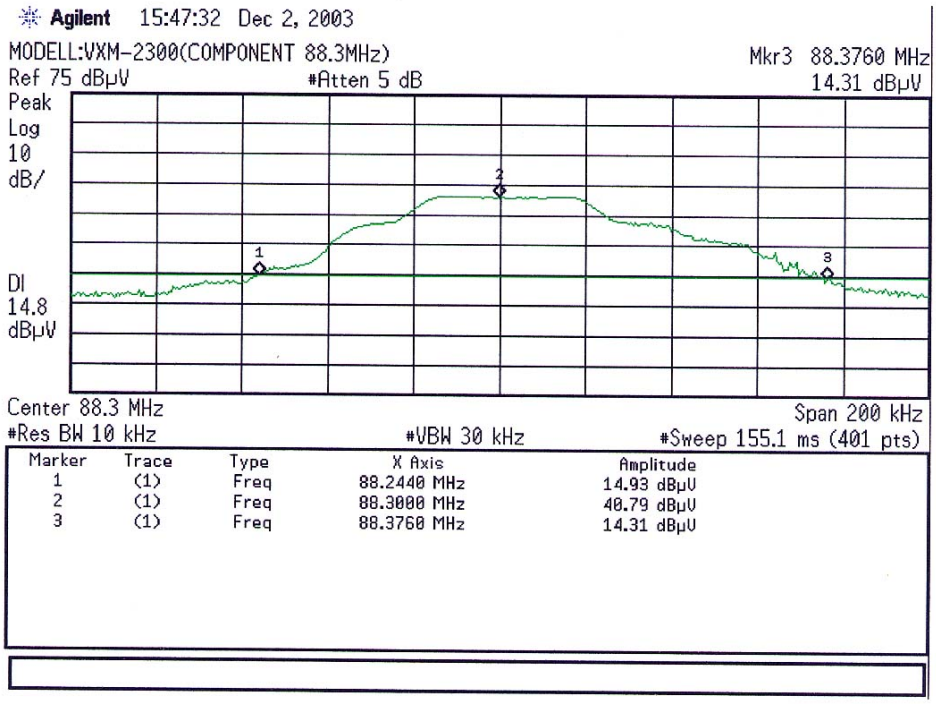
8.1.2 Emissions Band Measurement

NOTES:

1. All modes of operation were investigated, and the worst-case emissions are reported(Page 24).
2. The radiated limits are listed on Table 2 (Page 8).

Figure 1 : Occupied bandwidth measurement results

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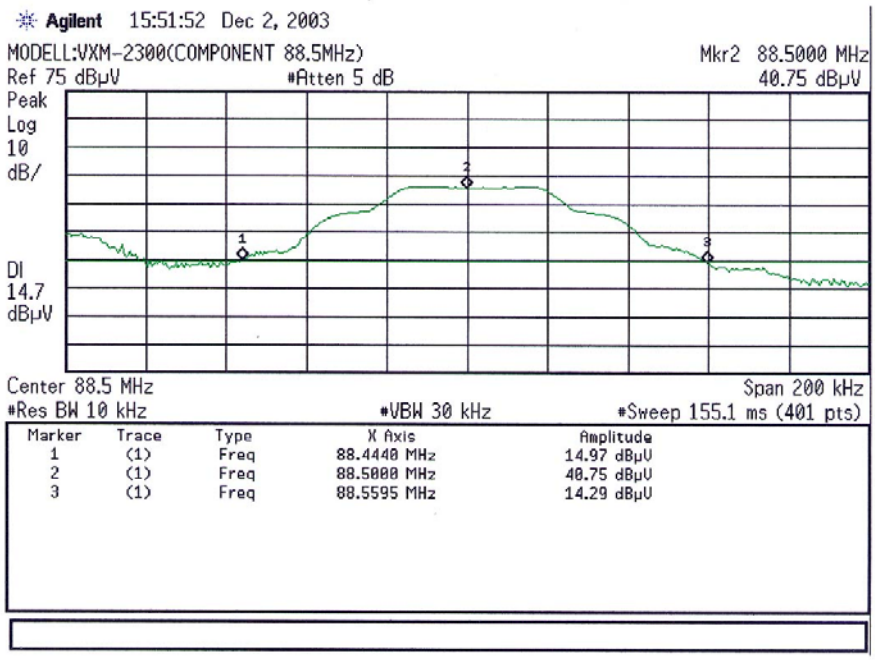
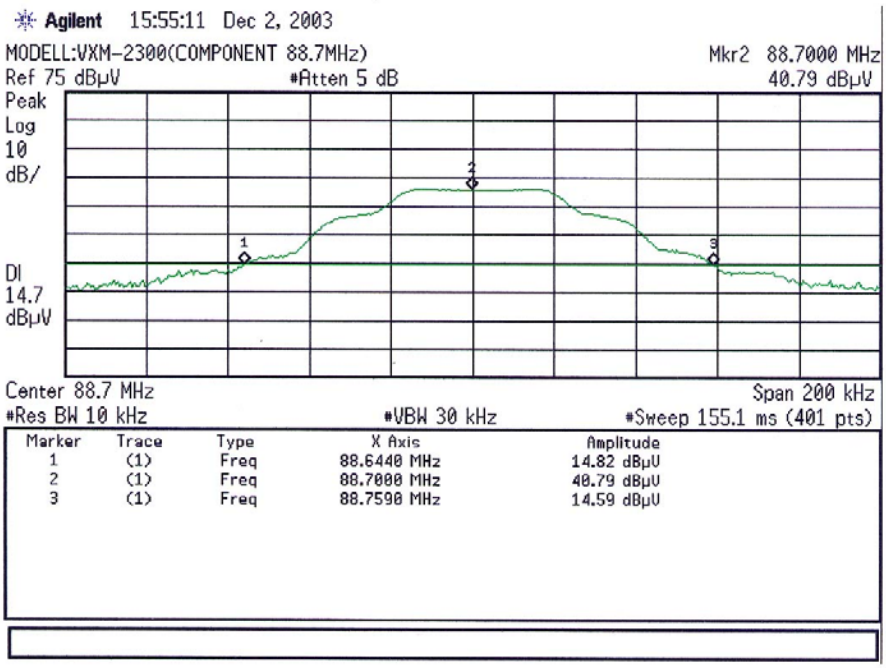
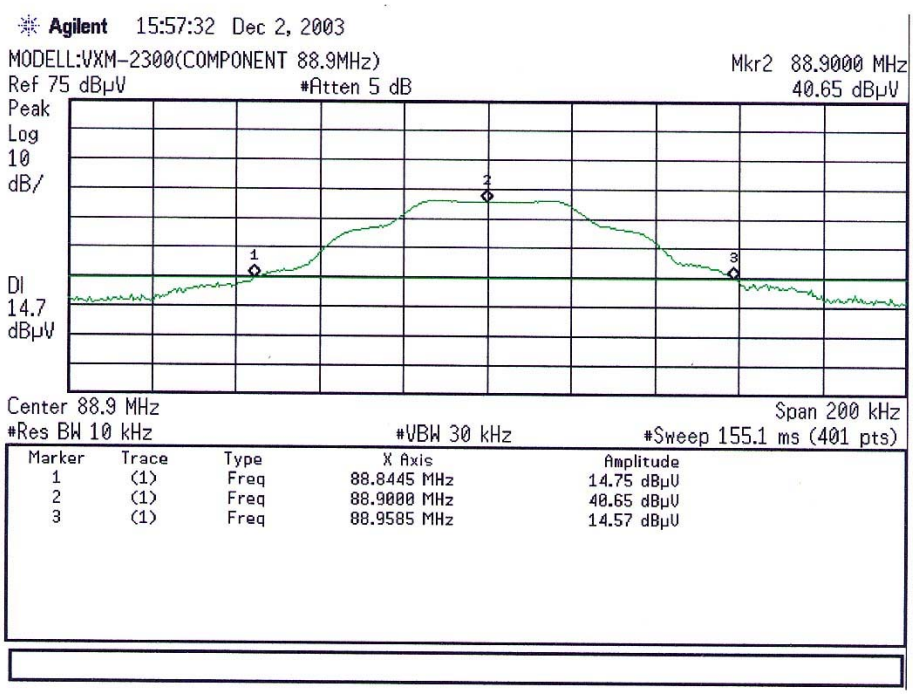
MODELL:VXM-2300(COMPONENT 88.3MHz)
Mkr3 88.3760 MHz
Ref 75 dBµV
#Atten 5 dB
14.31 dBµV
Peak
Log
10
dB/
DI
14.8
dBµV
Center 88.3 MHz
Span 200 kHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 155.1 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 88.2440 MHz 14.93 dBµV
2 (1) Freq 88.3000 MHz 40.79 dBµV
3 (1) Freq 88.3760 MHz 14.31 dBµV


Agilent 15:51:52 Dec 2, 2003
MODELL:VXM-2300(COMPONENT 88.5MHz)
Mkr2 88.5000 MHz
Ref 75 dBµV
#Atten 5 dB
40.75 dBµV
Peak
Log
10
dB/
DI
14.7
dBµV
Center 88.5 MHz
Span 200 kHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 155.1 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 88.4440 MHz 14.97 dBµV
2 (1) Freq 88.5000 MHz 40.75 dBµV
3 (1) Freq 88.5595 MHz 14.29 dBµV


Agilent 15:55:11 Dec 2, 2003
MODELL:VXM-2300(COMPONENT 88.7MHz)
Mkr2 88.7000 MHz
Ref 75 dBµV
#Atten 5 dB
40.79 dBµV
Peak
Log
10
dB/
Dl
14.7
dBµV
Center 88.7 MHz
Span 200 kHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 155.1 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 88.6440 MHz 14.82 dBµV
2 (1) Freq 88.7000 MHz 40.79 dBµV
3 (1) Freq 88.7590 MHz 14.59 dBµV


Agilent 15:57:32 Dec 2, 2003
MODELL:VXM-2300(COMPONENT 88.9MHz)
Mkr2 88.9000 MHz
Ref 75 dBµV
#Atten 5 dB
40.65 dBµV
Peak
Log
10
dB/
Dl
14.7
dBµV
Center 88.9 MHz
Span 200 kHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 155.1 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 88.8445 MHz 14.75 dBµV
2 (1) Freq 88.9000 MHz 40.65 dBµV
3 (1) Freq 88.9585 MHz 14.57 dBµV

9.1 Sample Calculations

$$dB\,\mu V = 20 \log_{10} \mu V$$

$$dB\,\mu V = dBm + 107$$

8.1.2 Example 1:

@ 20.3 MHz

Class B limit	= 250 μV = 47.96 dBμV
Reading	= - 67.8 dBm (calibrated level)
Convert to dbμV	= - 67.8 + 107 = 39.2 dBμV
$10^{(39.2/20)}$	= 91.2 μV
Margin	= 39.2 - 47.96 = - 8.76
	= **8.8 dB below limit**

8.1.3 Example 2:

@ 66.7 MHz

Class B limit	=	100 μV/m = 40.0 dBμV/m
Reading	=	- 76.0 dBm (calibrated level)
Convert to dbμV/m	=	- 76.0 + 107 = 31.0 dBμV/m
Antenna Factor + Cable Loss	=	5.8 dB
Total	=	36.8 dBμV/m
Margin	=	36.8 - 40.0 = - 3.2

= 3.2 dB below limit

10.1 Test Equipment

Type	Manufacture	Model Number	CAL Date
EMI Test Recever	Rohed & Schwarz	ESI40	2003.11.16
EMI Test Recever	Rohed & Schwarz	ESVS30	2003.07.16
LISN	Rohed & Schwarz	ESH2-Z5	2003.08.21
LISN	EMCO	3825/2	2003.02.24
Amplifier	Hewlett-Packard	8447E	2003.08.23
Aborbing Clamp	Rohed & Schwarz	MDS-21	2003.04.24
Dipole Antennas	Schwarzbeck	VHAP	2003.07.24
Dipole Antennas	Schwarzbeck	UHAP	2003.07.24
Biconical Antenna	Schwarzbeck	VHA9103	2003.07.23
Log-Periodic Antenna	Schwarzbeck	UHALP9107	2003.07.23
Antenna Position Tower	HD	MA240	N/A
Turn Table	EMCO	1050	N/A

Power Analyzer	Voltech	PM 3300	2003.02.15
Reference Network Impedance	Voltech	IEC 555	N/A
AC Power Source	PACIFIC	Magnetic Module	N/A
AC Power Source	PACIFIC	360AMX	2003.11.25
Controller	HD GmbH	HD 100	N/A
SlideBar	HD GmbH	KMS 560	N/A

11.1 Test Software Used

The EUT was acted standby mode during radiated and conducted testing.

NOTE: This is a sample of the basic program used during the test. However, during testing, a different software program may be used; whichever determines the worst-case condition. In addition, the program used also depends on the number and type of devices being tested.

The device under test was operated during the measurement under following conditions:

- 100/0/75/0 Colour bars
- 1000 Hz Audio signal
- DVD Play mode
- MP-3 mode

12.1 Conclusion

The data collected shows that **DVS KOREA.CO., LTD. DVD PLAYER.(FCC ID : PGJVXM2300)**

complies with §15.107, §15.109, §15.239(a) and §15.239(b) of the FCC Rules.