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
TEL : +82 31 639 8517 FAX : +82 31 639 8525

TEST REPORT

Manufacture;
HARSPER CO.,LTD.

546-4. Ami-Ri Bubai-Eub, Ichon-City, Kyoungki-Do Korea

HARSPER FRN : 00007-9131-06

Date of Issue : September 09, 2005

Test Report No.: HCT-F05-1109

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

FCC ID : **O5XHP-425VP**

MODEL : **HP-4250VP**

Rule Part(s):	**Part 15 & 2**
Equipment Class:	**FCC Class B Peripheral Device (JBP)**
Standard(s):	**FCC Class B: 2003**
EUT Type:	**PDP TV MONITOR**
Max. Resolution(s):	**1280×1024(@60Hz)**
Model(s):	**HP-4250VP**
Port/Connector(s):	**DVI&D-Sub(PC)Sound,DVI,HDMI,RS-232C,D-Sub(PC),Component1,2, Component Sound1,2,VIDEO 1,VIDEO OUTPUT2,VIDEO 2,AV, SPDIF(optical),Phone Jack,S-VIDEO,S-VIEDO/AC Sound,D-TV Antenna, A-TV Antenna,Speak Cable,AC Power**
LCD Panel :	**SAMSUNG(42AX-YD01)**

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 C63.4-2003.
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

TABLE OF CONTENTS

PAGE

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:	**HARSPER CO., LTD.**
Address:	**546-4. Ami-Ri, Bubai-Eub, Ichon-City, Kyoungki-Do Korea**

- **FCC ID : O5XHP-425VP**
- Equipment Class: **FCC Class B Peripheral Device (JBP)**
- EUT Type: **PDP TV MONITOR**
- Model(s): **HP-4250VP**
- Max. Resolution: **1280×1024(@60Hz)**
- Power Cord: **Unshielded**
- Rule Part(s): **FCC Part 15 Subpart B**
- Test Procedure(s): **ANSI C63.4 (2003)**
- Dates of Tests: November 21, 2005~ November 22, 2005
- Place of Tests: 254-1,MAEKOK-RI,HOBUP-MYUN,ICHON-SI,KYOUNGKI-DO,467-701,KOREA

2.1 INTRODUCTION

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 (ANSIC63.4-2001) was used in determining radiated and conducted emissions emanating from **HARSPER CO., LTD. PDP TV MONITOR FCC ID: O5XHP-425VP**

The open area test site and conducted measurement facility used to collect the radiateddata 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 Commissionand accepted dated July 23,2003 (Confirmation Number: EA90661)

3.1 PRODUCT INFORMATION

3.2 Equipment Description

Equipment Under Test (EUT) is the HARSPER CO.,LTD. (Model : HP-4250VP) 42-inch PDP TV MONITOR

FCC ID**: O5XHP-425VP**
Maximum Resolution(s): **1280×1024(@60Hz)**

Dimensions: **1220mm(W) x 708.4mm(H) x30.5mm(D)**

Power Supply: **AC 100-240V, 50/ 60Hz, 400W**

Connectivity: **TV 1,2Input: RF / CATV (ATSC)**
Composite Input/Output: RCA ×4 Port (AV INPUT 1,2,3 / AV OUTPUT 1)
Component 1, 2 Input: RCA×2 Port (Y, Pb/Cb, Pr/Cr: 480i, 480p, 576i, 576p, 720p, 1080i)
S-video Input: Mini Din 4Pin × 1 Port
PC Input :Mini D-Sub 15pin × 1Port /HDTV Input (480p,576p,720p(50/60Hz),1080i(50/60Hz))
DVI Input: Mini D-sub 29Pin ×1Port /HDTV Input(480p,576p,720p(50/60Hz),1080i(50/60Hz)),HDCP(Factory Option)
Audio In/Output: RCA × 6Port
Speaker output : Cinch Type × 4Port(Stereo L/R),Head Phone Jack × 1Port
External Control ports : Mini D-Sub 9Pin × 1Port
HDMI Port : HDMI × 1Port
SPDIF Port : SPDIF(Optical) × 1Port(5.1Channel)

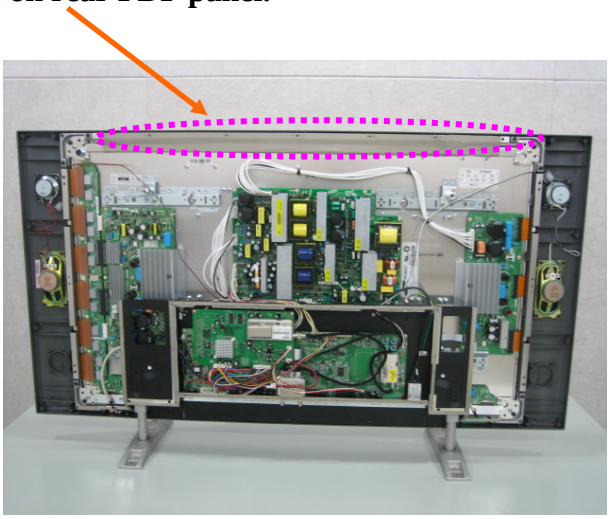
Power Consumption : **400Watt(Max)**

Weight (Net): **31.5Kg**

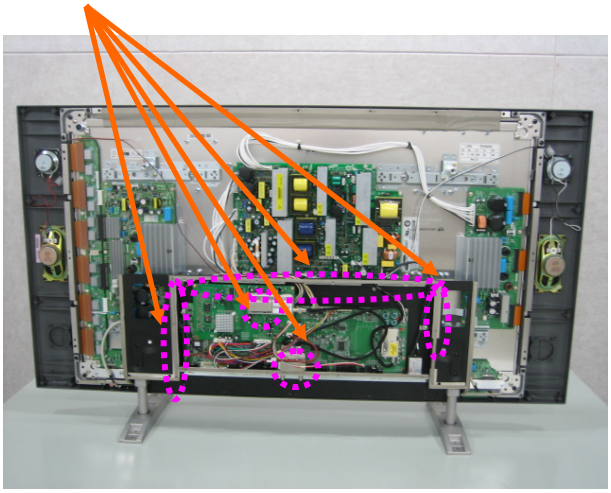
EMI Suppression Devices:

Modifications were made to the device. Please refer to the next page.

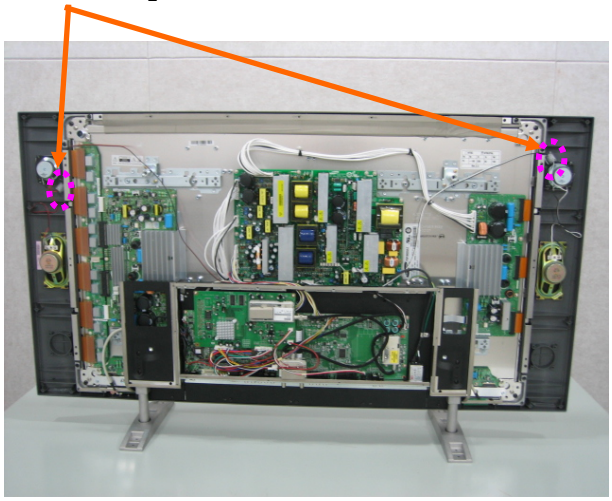
1. **Attach fabrictape on rear PDP panel.**



2. **Attach a gasket on TV Tuner and Board Bracket**



3. **Apply a ferrite Core to the Speaker cable**



4.1 Description of Tests(Conducted & Radiated)

4.2 Powerline Conducted Emission (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)	
Freq. Range	CISPR 22 Quasi-Peak	CISPR 22 Average
150kHz - 0.5MHz	66-56*	56-46*
0.5MHz - 5MHz	56	46
5MHz - 30MHz	60	50
*Limits decreases linearly with the logarithm of frequency		

Table 1. FCC CLASS B Conducted Emission Limits

4.3 Description of Tests(Radiated)

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**	
*** Limit extrapolated 20 dB/decade**			

Table 2. Radiated Class B limits @ 10-meters

5.1 Support Equipment Used

DEVICE TYPE	MANUFACTURER	MODEL NUMBER	FCC ID / DoC	CONNECTED TO
PDP TV MONITOR(EUT)	HARSPER CO., LTD.	HP-4250VP	O5XHP-425VP	P.C
P.C	DELL	OPTIPLEXGX620	DoC	EUT
MOUSE	DELL	MO56U0	DoC	P.C
KEY BOARD	DELL	SK-8115	DoC	P.C
PRINTER	H/P	C4569A	DoC	P.C
DVD	SAMSUNG	DVD-HD594	DoC	EUT
MPEG-Recoder	Tektronix	MTX 100	DoC	EUT
All Channel Converter	EIDEN	4200C-006	DoC	EUT
8VSB Modulator	EIDEN	3313b-002	DoC	EUT
TV PATTEN GENERATOR	PROMAX	DV-698	DoC	EUT

5.2 Cable Description

		Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (M)
PDP TV MONITOR (EUT)	Power	N	N/A	1.8(P)
	Video	N/A	Y	1.6(D)
	Audio	N/A	Y	1.5(D)
	RS-232	N/A	Y	1.5(D)
	Component	N/A	Y	1.8(D)
	HDMI	N/A	Y	1.5(D)
	D-Sub	N/A	Y	1.8(D)
	DVI	N/A	N	1.8(D)
	S-video	N/A	Y	1.6(D)
	ANT.	N/A	Y	3.0(D)
PC		N	N/A	1.8(P)
KEY BOARD		N/A	Y	1.8(D)
MOUSE		N/A	Y	1.8(D)
PRINTER		N	Y	1.8(P,D)

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

5.3 Noise Suppression Parts on Cable. (I/O CABLE)

		Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
PDP TV MONITOR (EUT)	Video	N	N/A	Y	BOTH END
	Audio	N	N/A	Y	BOTH END
	RS-232	N	N/A	Y	BOTH END
	Component	N	N/A	Y	BOTH END
	HDMI	N	N/A	Y	BOTH END
	D-Sub	Y	BOTH END	Y	BOTH END
	DVI	Y	BOTH END	Y	BOTH END
	S-video	N	N/A	Y	BOTH END
	ANT.	N	N/A	Y	BOTH END
PC		N	N/A	N/A	N/A
KEYBOAD		N	N/A	Y	PC END
MOUSE		N	N/A	Y	PC END
PRINTER		Y	BOTH END	Y	BOTH END

6.1 CONDUCTED TEST DATA

- Analog

HCT

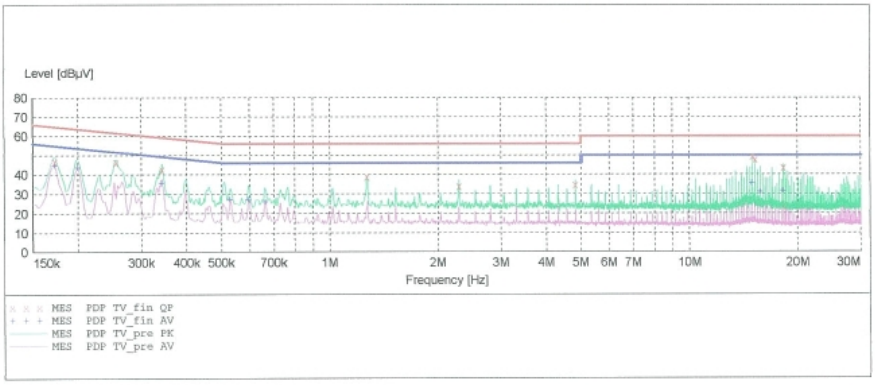
EMC TEST LAB

```
EUT:                  HP-4250VP
Manufacturer:         HARSPER
Operating Condition:  1280 X 1024 60Hz(A)
Test Site:            SHIELD ROOM
Operator:             GS, KIM
Test Specification:   CISPR 22 CLASS B
Comment:              H
```

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 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
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PDP TV_fin QP"

11/22/2005 8:30PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.172600	46.80	10.1	65	18.0	---	---
0.255100	46.30	10.1	62	15.3	---	---
0.342600	42.70	10.1	59	16.4	---	---
1.270000	39.00	10.2	56	17.0	---	---
2.290000	34.10	10.3	56	21.9	---	---
4.830000	34.70	10.3	56	21.3	---	---
15.000000	49.30	10.5	60	10.7	---	---
15.255000	47.70	10.5	60	12.3	---	---
18.305000	43.60	10.5	60	16.4	---	---

MEASUREMENT RESULT: "PDP TV_fin AV"

11/22/2005 8:30PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.172600	44.80	10.1	55	10.1	---	---
0.200100	43.50	10.1	54	10.1	---	---
0.342600	35.70	10.1	49	13.4	---	---
0.530000	27.20	10.1	46	18.8	---	---
0.595000	27.40	10.2	46	18.6	---	---
0.665000	26.20	10.2	46	19.8	---	---
15.000000	35.50	10.5	50	14.5	---	---
15.765000	31.00	10.5	50	19.0	---	---
18.305000	31.50	10.5	50	18.5	---	---

HCT

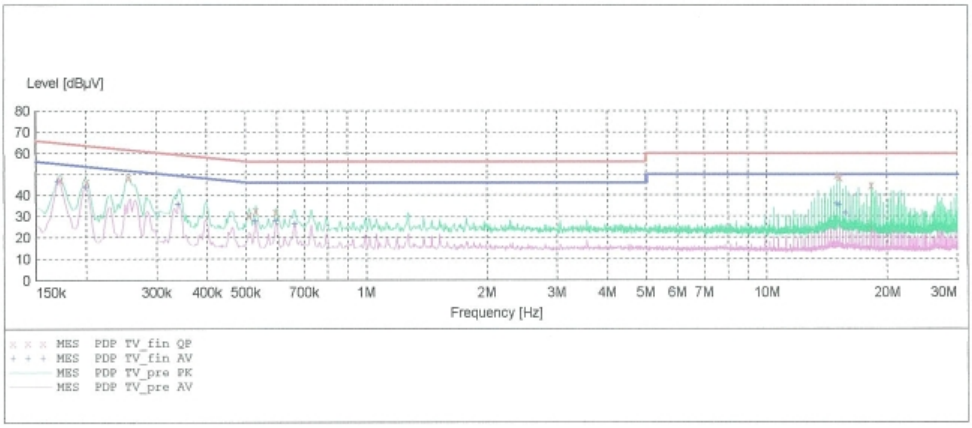
EMC TEST LAB

```
EUT:                  HP-4250VP
Manufacturer:         HARSPER
Operating Condition:  1280 X 1024 60Hz(A)
Test Site:            SHIELD ROOM
Operator:             GS, KIM
Test Specification:   CISPR 22 CLASS B
Comment:              N
```

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 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
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PDP TV_fin QP"

11/22/2005 8:33PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.172600	47.30	10.1	65	17.5	---	---
0.200100	46.40	10.1	64	17.2	---	---
0.255100	48.40	10.1	62	13.2	---	---
0.510000	30.70	10.1	56	25.3	---	---
0.530000	32.80	10.1	56	23.2	---	---
0.595000	31.80	10.2	56	24.2	---	---
15.000000	49.70	10.5	60	10.3	---	---
15.255000	48.40	10.5	60	11.6	---	---
18.305000	44.80	10.5	60	15.2	---	---

MEASUREMENT RESULT: "PDP TV_fin AV"

11/22/2005 8:33PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.170100	46.60	10.1	55	8.3	---	---
0.200100	43.80	10.1	54	9.8	---	---
0.340100	35.60	10.1	49	13.6	---	---
0.530000	27.70	10.1	46	18.3	---	---
0.595000	27.70	10.2	46	18.3	---	---
0.665000	26.50	10.2	46	19.5	---	---
15.000000	35.90	10.5	50	14.1	---	---
15.255000	35.30	10.5	50	14.7	---	---
15.760000	31.60	10.5	50	18.4	---	---

- Digital

HCT

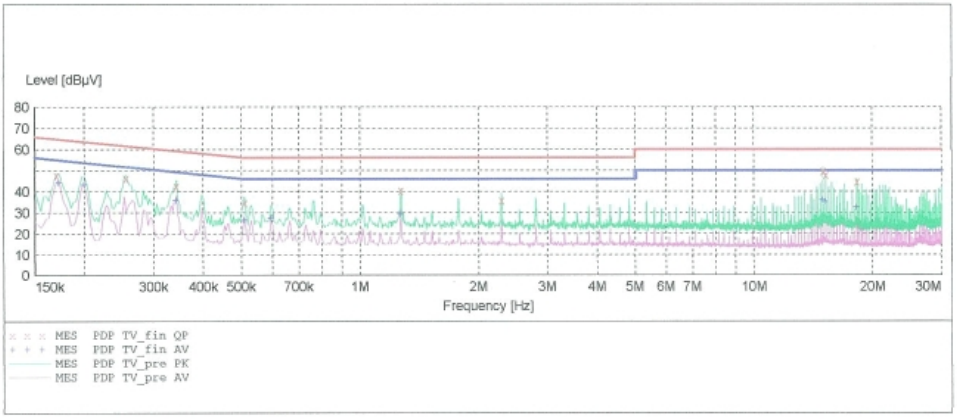
EMC TEST LAB

```
EUT:                    HP-4250VP
Manufacturer:           HARSPER
Operating Condition:    1280 X 1024 60Hz(D)
Test Site:              SHIELD ROOM
Operator:               GS, KIM
Test Specification:     CISPR 22 CLASS B
Comment:                H
```

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 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
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PDP TV_fin QP"

11/22/2005 8:21PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.170100	47.80	10.1	65	17.1	---	---
0.255100	46.50	10.1	62	15.1	---	---
0.342600	42.80	10.1	59	16.4	---	---
0.510000	34.90	10.1	56	21.1	---	---
1.270000	40.60	10.2	56	15.4	---	---
2.290000	35.90	10.3	56	20.1	---	---
15.000000	49.80	10.5	60	10.2	---	---
15.255000	48.20	10.5	60	11.8	---	---
18.305000	44.80	10.5	60	15.2	---	---

Page 1/2 11/22/2005 8:22PM HCT EMC LAB

MEASUREMENT RESULT: "PDP TV_fin AV"

11/22/2005 8:21PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.172600	44.40	10.1	55	10.5	---	---
0.200100	43.30	10.1	54	10.3	---	---
0.342600	35.70	10.1	49	13.5	---	---
0.510000	26.60	10.1	46	19.4	---	---
0.595000	27.50	10.2	46	18.5	---	---
1.270000	29.40	10.2	46	16.6	---	---
15.000000	36.10	10.5	50	13.9	---	---
15.255000	35.20	10.5	50	14.8	---	---
18.305000	32.60	10.5	50	17.4	---	---

HCT

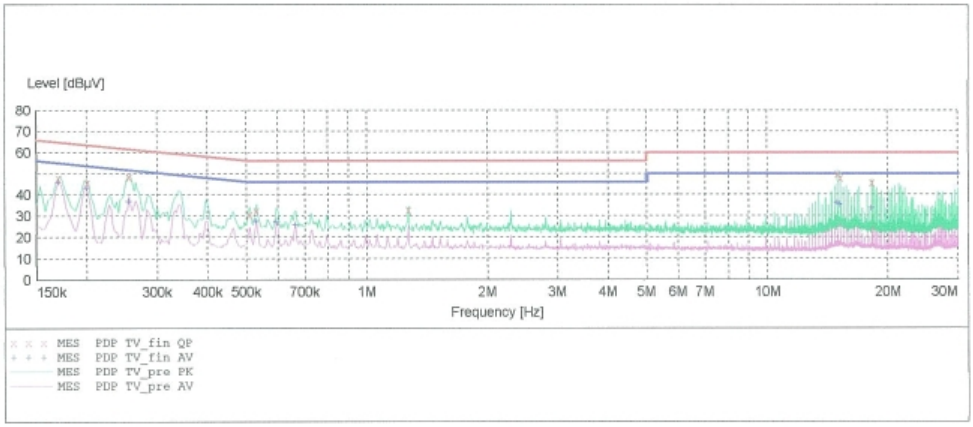
EMC TEST LAB

EUT: HP-4250VP
Manufacturer: HARSPER
Operating Condition: 1280 X 1024 60Hz(D)
Test Site: SHIELD ROOM
Operator: GS, KIM
Test Specification: CISPR 22 CLASS B
Comment: N

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 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
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PDP TV_fin QP"

11/22/2005 8:18PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.170100	47.70	10.1	65	17.3	---	---
0.200100	45.80	10.1	64	17.8	---	---
0.255100	48.40	10.1	62	13.2	---	---
0.510000	30.80	10.1	56	25.2	---	---
0.530000	32.40	10.1	56	23.6	---	---
1.270000	32.90	10.2	56	23.1	---	---
15.000000	49.90	10.5	60	10.1	---	---
15.255000	48.10	10.5	60	11.9	---	---
18.305000	45.80	10.5	60	14.2	---	---

MEASUREMENT RESULT: "PDP TV_fin AV"

11/22/2005 8:18PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.170100	46.00	10.1	55	8.9	---	---
0.200100	43.10	10.1	54	10.5	---	---
0.255100	36.80	10.1	52	14.8	---	---
0.530000	27.50	10.1	46	18.5	---	---
0.595000	27.10	10.2	46	18.9	---	---
0.665000	25.50	10.2	46	20.5	---	---
15.000000	36.10	10.5	50	13.9	---	---
15.255000	35.30	10.5	50	14.7	---	---
18.305000	33.50	10.5	50	16.5	---	---

NOTES:

1. **All modes of operation were investigated, and the worst-case emissions are reported.**
2. **The conducted limits are listed on Table 1 (Page 7).**
3. **Line H = Hot Line N = Neutral**

** Measurements using CISPR quasi-peak mode.

7.1 RADIATED TEST DATA

Frequency MHz	Reading dBuV	Ant. Factor dB	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
61.8	9.5	11.0	1.8	H	22.3	30.0	7.7
65.4	8.4	10.4	1.8	V	20.6	30.0	9.4
85.6	11.5	7.7	2.1	V	21.3	30.0	8.7
145.4	8.0	12.9	2.7	V	23.6	30.0	6.4
186.8	8.9	10.7	3.1	V	22.7	30.0	7.3
268.9	15.0	11.9	3.7	H	30.6	37.0	6.4
287.7	15.2	12.6	3.9	H	31.7	37.0	5.3
300.0	13.6	13.0	4.0	H	30.6	37.0	6.4
379.7	10.6	14.6	4.5	V	29.7	37.0	7.3
385.2	12.1	14.7	4.5	H	31.3	37.0	5.7
400.3	12.3	15.1	4.6	V	32.0	37.0	5.0

1280 X 1024, 60Hz DSUB Mode

Frequency MHz	Reading dBuV	Ant. Factor dB	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
51.3	6.5	12.3	1.5	V	20.3	30.0	9.7
61.8	8.7	11.0	1.8	H	21.5	30.0	8.5
90.8	12.5	7.7	2.1	H	22.3	30.0	7.7
143.1	8.2	12.9	2.6	V	23.7	30.0	6.3
180.0	11.5	11.2	3.0	V	25.7	30.0	4.3
212.3	8.6	10.0	3.3	H	21.9	30.0	8.1
270.0	14.5	12.0	3.8	H	30.3	37.0	6.7
399.7	11.7	15.0	4.6	H	31.3	37.0	5.7
439.7	11.2	16.5	4.8	V	32.5	37.0	4.5
480.0	8.8	16.9	5.0	V	30.7	37.0	6.3
559.7	9.1	18.5	5.4	H	33.0	37.0	4.0

1280 X 1024, 60Hz DVI Mode

Radiated Measurements at 10-meters.

NOTES:

1. All modes of operation were investigated, and the worst-case emissions are reported.
2. The radiated limits are listed on Table 2 (Page 8).
3. We performed the test up to 2GHz, but not found noise above 1GHz.

** AFCL = Antenna Factor (Roberts dipole) and Cable Loss .

*** 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 1MHz. The peak level complies with the average limit. Peak mode is used with linearly polarized horn antenna and low-loss microwave cable.

8.1 Sample Calculations

$$dB\,\mu V = \mathbf{20\ log}_{10}(\mu V)$$

$$dB\,\mu V = \mathbf{dBm + 107}$$

8.2 Example 1:

@ 15.0 MHz

Class B limit	=	60 dB μV
Reading	=	49.9 dB μV (calibrated level)
Margin	=	49.9 - 60 = - 10.1 dB μV
	=	**10.1 dB below limit**

8.3 Example 2:

@ 559.7 MHz

Class B limit	=	37 dB μV/m
Reading	=	9.1 dB μV/m (calibrated level)
Antenna Factor + Cable Loss	=	23.9 dB
Total	=	33.0 dB μV/m
Margin	=	33.0 - 37 = -4.0 dB μV/m
	=	**4.0 dB below limit**

9.1 Test Equipment

Type	Manufacture	Model Number	CAL Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI40	2005.11.16
EMI Test Receiver	Rohde & Schwarz	ESVS30	2006.07.01
EMI Test Receiver	Rohde & Schwarz	ESCI	2006.09.13
LISN	Rohde & Schwarz	ESH2-Z5	2006.04.26
Attenuator	Rohde & Schwarz	ESH3-Z2	2005.11.16
TRILOG Antenna	Schwarzbeck	9160	2006.03.31
Antenna Position Tower	HD	MA240	N/A
Turn Table	EMCO	1050	N/A
Power Analyzer	Voltech	PM 3300	2006.03.22
Reference Network Impedance	Voltech	IEC 555	N/A
AC Power Source	PACIFIC	Magnetic Module	N/A
AC Power Source	PACIFIC	360-AMX	2005.11.25
Controller	HD GmbH	HD 100	N/A
SlideBar	HD GmbH	KMS 560	N/A
PULSE LIMITER	Rohde & Schwarz	ESH3-Z2	2005.11.16

10.1 Test Software Used

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The software, contained on a 3-1/2 inch disc, was inserted into drive A and is auto starting on power-up. Once loaded, the program sequentially exercises each system component in turn. The sequence used is :(1) Display test, (2) RS 232 test (3) Key board test,(4) Printer test,(5) FDD test,(6) HDD test. The complete cycle takes about 20 seconds and is repeated continuously. As the keyboard and mouse are strictly input devices, no data is transmitted to them during test. They are however, continuously scanned for data input activity. The video resolution modes setup and change program was used during the radiated and conducted emission 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.

11.1 Conclusion

The data collected shows that the HARSPER CO., LTD. 42-inch PDP TV MONITOR **FCC ID: O5XHP-425VP** complies with §15.107 and §15.109 of the FCC Rules.